

# The Economics of Conservation Tillage in Alberta


An analysis of the costs and returns  
of conservation tillage systems during the five-year  
Systems Evaluation Program (1988 - 1992).



**Alberta**

AGRICULTURE, FOOD AND  
RURAL DEVELOPMENT

Production Economics Branch



Digitized by the Internet Archive  
in 2016

CANADIANA

JAN 10 1994

**THE ECONOMICS OF  
CONSERVATION TILLAGE  
IN ALBERTA**

**By Terry Appleby**

**October 1993**







## ACKNOWLEDGEMENTS

This publication was not the product of a single person. Many people provided help into its final look.

A special thanks to Russel Horvey of the Conservation and Development Branch for his inspiration to produce a publication highlighting the Systems Evaluation program. Also for some of the ideas that were studied and reported about.

To Frank Jetter and Matthew Machielse of the Crop Production section of the Production Economics Branch must also go a special word of appreciation: Matthew for providing data about the costs and characteristics of conventional farm systems in the province, Frank for providing very timely advice and wisdom about the aspects of direct seeding.

Of course the study could not have been completed without the availability and analysis of the data. A big thanks is given to Loren Yaremchuk for his help in analysing the data and providing the information contained in the tables. I also want to recognize the contribution of the Regional Soil Conservation Coordinators and agrologists who have collected the data from producers during the past five years.

The biggest thanks of all must go to the producers who have been enrolled on the program. The time they have set aside annually to provide information about their operations has been most appreciated. Their commitment to the program has supplied unique information about the conservation farming activities in the province. The result of their commitment has been this publication.



## TABLE OF CONTENTS

	<u>PAGE</u>
A. INTRODUCTION .....	1
B. WEATHER & GROWING SEASON MOISTURE LEVELS .....	3
C. SYSTEMS EVALUATION .....	5
D. IDENTIFYING CONSERVATION FARMING SYSTEMS .....	8
E. PROFILE OF A CONSERVATION PRODUCER .....	10
F. CHANGING THE WAY TO FARM .....	12
G. THE MACHINERY COMPLEMENT IN CONSERVATION TILLAGE .....	15
H. IS WEED CONTROL A PROBLEM? – PRODUCER FEEDBACK .....	17
I. CONSERVATION FARMING SAVES PRODUCERS TIME .....	19
J. THE ECONOMICS OF CONSERVATION TILLAGE .....	23
K. SHOULD PRODUCERS MAKE A CHANGE TO CONSERVATION TILLAGE? .....	25
L. CONCLUSIONS .....	28
APPENDIX .....	29





## **A. INTRODUCTION**

There is growing awareness that crop production practices must change if soil productivity is to be preserved and enhanced. As a result many producers have changed the way they farm. These changes have come with both economic and management considerations. Farm managers need to be flexible, comfortable with change, and prepared to accept more risk than in the past. In the area of economics they have needed to assess their profit picture with yields, uncertain moisture levels and field operation and machinery costs all changing.

This publication reviews the management and economic aspects associated with changes occurring in conservation farming. It also provides information about the attitudes and flexibility required by farm managers. And it provides an economic and agronomic overview of the producers or cooperators involved in conservation farming activities in Alberta in 1992.

A table is presented that provides an overview of the number and types of conservation systems in use in the province. The costs involved in conservation farming systems producing wheat over the past five years are also provided.

All the data involved in this analysis and review originates from the Systems Evaluation (SE) database. This database is updated annually and monitors farm activities associated with conservation farming. Information about the agronomic conditions of various farms and the field operations associated with tillage, crop rotations and herbicide usage is collected annually. A thorough survey form is completed each fall by participating farm managers and Regional Conservation and Development Branch personnel.

The program began in 1988 as a subcomponent of the Canada Alberta Soil Water and Cropping Research Technology Transfer (CARTT) program. From an initial four producers and seven fields enrolled in the program that year participation levels have grown to 47 producers who enrolled 65 fields in 1992.

The SE program has two primary goals directed to the conservation farming public: (1) economic efficiency – to measure the net economic returns per acre when

farm cropping practices are changed; and (2) system description – to describe the farming activities that are proving to be successful in addressing conservation farming goals. Participating farm managers provide information and receive annual reports that list the farm activities on their fields and provide a summary of the costs and returns for their operation. Summaries are also provided about the costs and returns of other participants in the province producing under similar crop conditions. The information provided includes costs per acre for herbicides, field operations and fertilizer usage.

In using this publication farm managers are advised to consider this information as a supplement to that obtained from fellow producers or farm information sources.



## **B. WEATHER AND GROWING SEASON MOISTURE LEVELS**

The success of conservation farming is significantly affected by moisture levels. The level of moisture depends on the amounts accumulated from the previous fall, winter snowfall and rainfall prior to and at the time of seeding. Producers consider moisture as an important variable when they assess the management decisions and risk required to change to a conservation tillage system.

In 1992 Alberta experienced a variety of weather, some of which had negative effects on profit levels. Much of the stress placed on Alberta crops during the year stemmed from unusually low precipitation levels the previous year. Fall 1991 stubble soil moisture was either low or very low on over 80% of the agricultural areas of the province. The remaining 20% was in the medium category.

Winter precipitation was less than half of normal in the south, and about 75% of normal in central and northeastern Alberta. Also there was little or no spring run off in the main crop growing areas of the province.

At springtime stubble soil moisture was mostly low to very low in the northeastern, east-central, and southern parts of the province. The Peace region and west central Alberta had medium and high stubble soil moisture respectively.

June rainfall was above normal in southwestern Alberta and near or slightly below normal in northeastern Alberta and the Peace region. The total rainfall in Alberta for April, May and June averaged about 145 mm. Locations in central and southern Alberta got considerably more. Northeastern Alberta received about 120 mm, a shortfall of about 25 mm or about one spring month of rain.

Summer precipitation was double the norm in Southwestern Alberta in contrast to the as much as 50% reduction in rainfall in the northeast. These dry weather conditions were inadequate to meet crop needs.

Overall precipitation levels for the complete 1991/92 crop year were below long term levels (Figure 1).

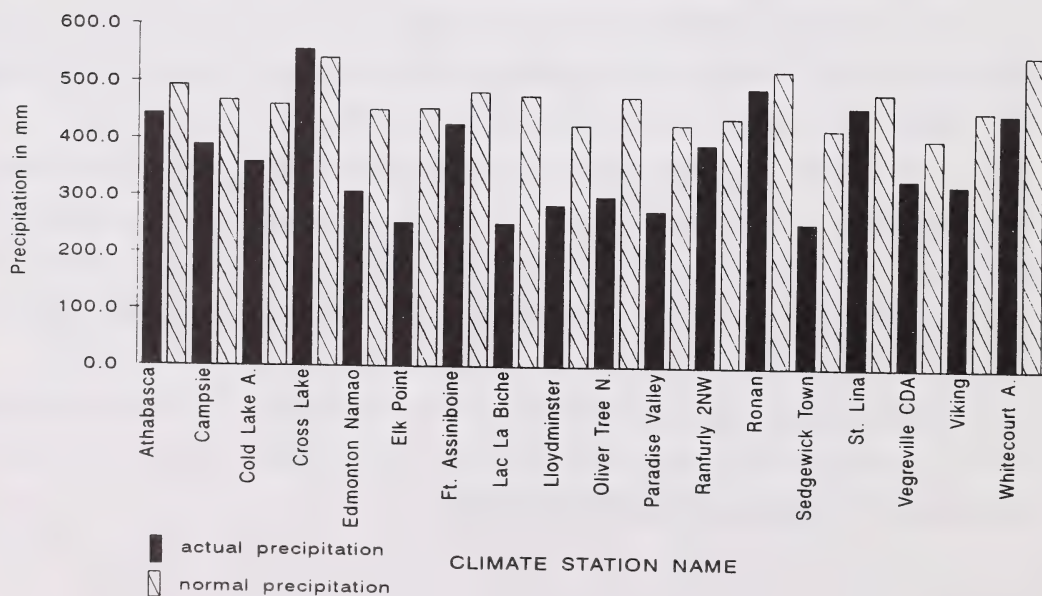
Lack of precipitation affected grain yields but the major adverse impact upon farm revenues and assessing the impact of conservation farming activities stemmed from the record breaking snowfall between August 21 and August 23, 1992 which reduced yields and increased harvesting costs. An accompanying frost severely affected grain quality.

Taken together spotty precipitation throughout the province, an early frost, and late August snowfall placed downward pressure on farm net incomes.

Producers were required to assess the success of their conservation management decisions in the context of abnormal weather conditions.

FIGURE 1

### Actual and Normal Precipitation for 1991/92 Crop Year



Crop year=Sept.1, 1991 to Aug. 31, 1992  
 Normal precip. based on Environment Canada 1951-80 normals  
 Prepared 09FEB93 by Alberta Agriculture Conservation & Development Br.

### C. SYSTEMS EVALUATION

During the past 5 years many producers have been interested in monitoring the success of their conservation farming systems from both an economic and system approach. Producers supplied data about their conservation farming activities and the field operations performed on a farm field within their total operation. Most of the farm systems being studied used reduced tillage as their main form of weed control (Figure 2). Field sizes also varied quite widely with an average size of about 85 acres (Figure 3).

FIGURE 2

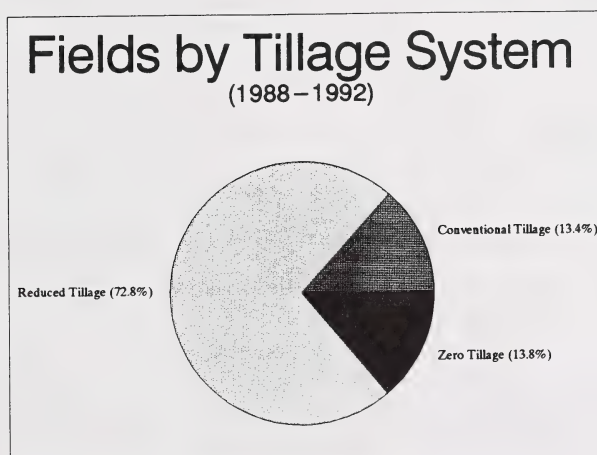
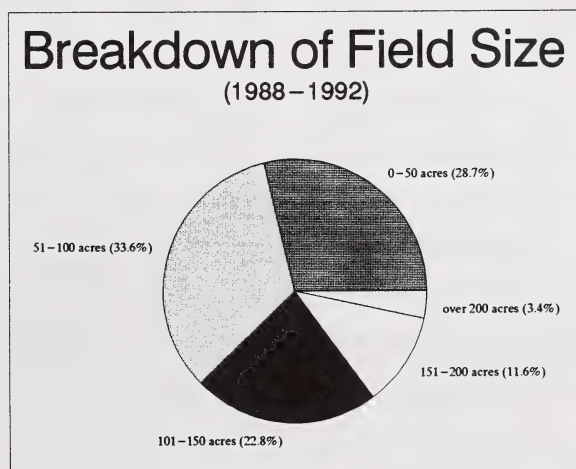


FIGURE 3





During the 1988–1992 time period there were 60 farm managers in the province who participated in the SE program. The level of new participants was lower in 1992 compared to previous years yet 65 fields were monitored during the year by 47 farm managers (Tables 1 & 2).

**TABLE 1: COOPERATORS ENROLLED ON SYSTEMS EVALUATION**

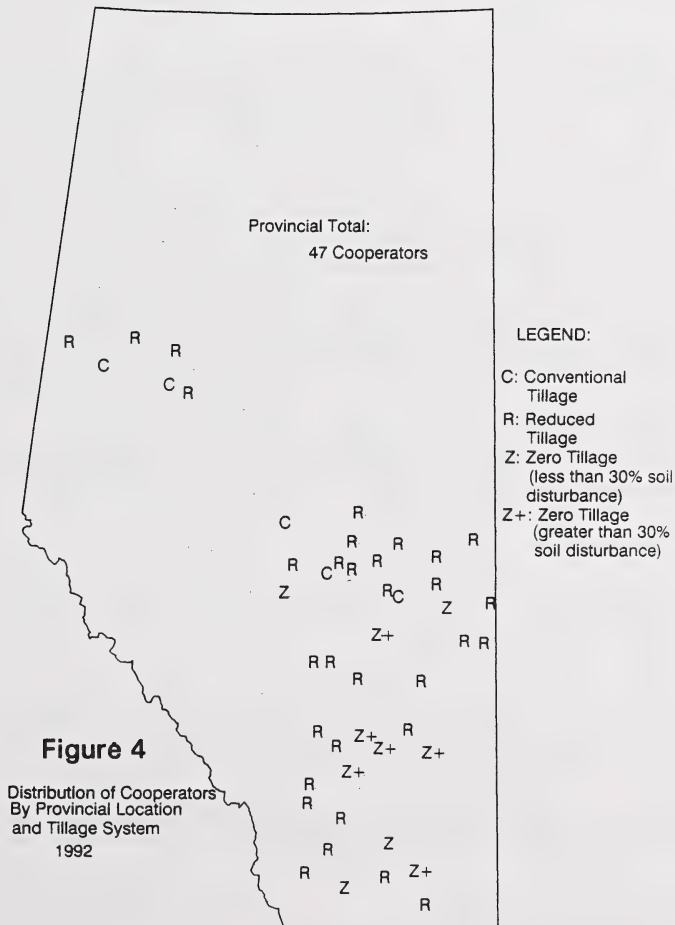
Year	Region						Total
	1	2	3	4	5	6	
1988	0	2	0	0	1	1	4
1989	5	2	0	0	3	7	17
1990	3	2	7	4	2	3	21
1991	2	4	0	7	0	2	15
1992	0	0	0	0	3	0	3
Total	10	10	7	11	9	13	60

Legend:      Region 1 – Lethbridge area  
                  Region 2 – Airdrie area  
                  Region 3 – Red Deer area  
                  Region 4 – Vermilion area  
                  Region 5 – Barrhead area  
                  Region 6 – Peace River area

The greatest amount of producer participation during the past five years has originated in the Peace River region of the province. This is a grey wooded soil area. Here there have been 13 producers enrolled on the program during the five years. This is marginally higher than the number of producers enrolled in the Vermilion, Lethbridge and Airdrie areas. Many of these producers enrolled more than one field under the program. In any given year producer participation in the program extended completely across the province and encompassed operations on fields of varying soil type (Figure 4). All enrolled fields had information supplied about the input costs, crop yields, timing and nature of the field operations, type of machinery used, and field agronomics unique to the cropping activities practised on it.

**TABLE 2: FIELDS ENROLLED ON SYSTEMS EVALUATION**

	Region						
Year	1	2	3	4	5	6	Total
1988	0	5	0	0	1	1	7
1989	6	9	0	0	4	9	28
1990	14	12	8	6	6	19	65
1991	22	16	7	14	8	19	86
1992	12	18	5	11	10	9	65
Total	54	60	20	31	29	57	251



## D. IDENTIFYING CONSERVATION FARMING SYSTEMS

The fields under study were located across the province and encompassed differing soil types, moisture levels, and conservation practices. The practices primarily involved variations in the tillage practice used and whether forages and fallow were prime components of the cropping rotation.

By identifying conservation farming systems using these three main criteria it was possible to highlight the major types of cropping systems being studied in each region of the province over the five years (Table 3).

**TABLE 3: TYPES OF CONSERVATION SYSTEMS IN ALBERTA – 1988–1992**

SYSTEM				REGION						
No.	Tillage	Fallow	Forage	1	2	3	4	5	6	Total
1	ZT	NO	NO	1	2	1	1	1	2	8
2	ZT	NO	YES	0	0	0	0	1	0	1
3	ZT	YES	NO	2	2	1	1	0	0	6
4	ZT	YES	YES	0	0	0	0	0	0	0
5	RT	NO	NO	3	1	4	5	0	1	14
6	RT	NO	YES	0	1	1	1	4	6	13
7	RT	YES	NO	5	7	1	2	1	0	16
8	RT	YES	YES	0	0	0	0	0	3	3
9	CT	NO	NO	1	0	1	1	0	0	3
10	CT	NO	YES	0	0	1	0	3	1	5
11	CT	YES	NO	0	0	0	0	0	0	0
12	CT	YES	YES	0	0	0	0	0	3	3
TOTAL		---	---	12	13	10	11	10	16	72

### LEGEND

ZT = ZERO TILLAGE

RT = REDUCED TILLAGE

CT = CONVENTIONAL TILLAGE



The majority of the systems under study used a reduced tillage system on their farm. They combined this with fallow and no forages in their crop rotation. This type of combination is highly characteristic of producers who use 50/50 crop rotations and minimum tillage. Of the 18 farm managers using this system 9 were from region 2, the Airdrie region and a brown soil area.

The next largest group had six producers located in the Lethbridge area.

In this area seven producers were using zero tillage with no fallow or forages in rotation in 1992. This is most characteristic of systems that are continuous cropping.

### TYPICAL SYSTEM DESCRIPTIONS

Conservation systems are more commonly identified by some major aspect of the system. Some examples of the types of systems that can be identified from the above characteristics are as follows:

- 1) **Continuous Cropping** – No. 1, 2, 5, 6, 9, 10  
A system identified by its annual production of cereal, oilseed or legume crops. Fallow is not included in the rotation.
- 2) **Chemfallow** – No. 3, 4  
A zero tillage system which uses herbicides during the fallow year for weed control. It may or may not include forages in the rotation.
- 3) **Legume Incorporation** – No. 6, 8, 10, 12  
A soil enhancement system which uses forages in rotation for incorporation purposes.
- 4) **Extended Rotation with Cereals/Oilseeds** – No. 2, 6, 7, 10, 11  
This system combines a period of continuous cropping in traditional crops with an intermittent fallow or forage year.
- 5) **50/50 Rotation** – No. 7, 11  
A cropping system consisting of a crop–fallow rotation on an alternating basis.
- 6) **Minimum Tillage** – No. 5, 6, 7, 8  
A system employing as few tillage passes as possible to control weeds.
- 7) **Zero Tillage** – No. 1, 2, 3, 4  
A system involving seeding into soil undisturbed by any fall or spring tillage.

## **E. PROFILE OF A CONSERVATION PRODUCER**

Is conservation farming for everyone? Or is there some characteristic(s) required by producers in order to be successful in conservation farming?

This may be an important question for producers if they are hesitant about making any changes in their system. To determine the extent to which certain factors have a bearing upon any success producers in the SE database were asked:

"To what do you attribute the success of your conservation system?".

The responses to this generally fall into two categories: technological progress and management factors. Technological progress can be defined as those elements of crop farming that offer new and different ways to crop effectively. An example of this would be the availability of direct seeding drills which permitted alternative seeding methods to be explored. Management factors are those personal attributes that producers must have in order to handle the wide range of challenges facing them. An obvious example of this would be the producers level of farm experience. Table 4 expresses these factors in percentage terms.

**TABLE 4: CONSERVATION TILLAGE SUCCESS FACTORS**

<b>Rank</b>	<b>Factor</b>	<b>%</b>	<b>Type</b>
1	Machinery	25	technological
2	Chemicals	14	technological
3	Forages in Rotation	11	management
4	Management Flexibility	10	management
5	Experience	7	management
6	Reduced Cultivation	6	management
7	Timeliness of Decisions	5	management
8	Attitude to Change	5	management
9	Management of Straw	5	management
10	Having Livestock	3	management
11	Management Capability	3	management
12	Management of Moisture	3	management
13	Choice of Rotation	2	management
14	Good Weed Control	1	management
	<b>TOTAL</b>	<b>100</b>	

Producers rank recent technological advances in cropping to be the major reasons for their success. Both availability of new farm machinery and the presence of lower cost herbicides were felt to have contributed 39% to their systems success. The balance of their success is attributable to management. Of these factors the inclusion of forages and legumes in their rotation is felt to be the most important reason and was rated at 11%. The need to be flexible and have sufficient cropping experience were ranked as the second and third most important management factors at 10% and 7% respectively.

In total producers feel that these management factors in addition to straw, financial, and moisture management represented 61% of the reason why they were successful in their operations.

## F. CHANGING THE WAY TO FARM

It has been said that "the first requirement for change is the realization that change is needed". Farmers practising conservation farming have faced this same challenge. After reviewing the way they farmed a decision was made to change. This process of change has meant an annual assessment of their operations and a review of the ways in which they can improve. Following is a review of the comments made by cooperators in the program during 1992 about the changes they planned to make for the 1993 crop season. The changes are grouped by tillage system and crop grown in 1992.

### TYPE OF TILLAGE: ZERO/DIRECT SEEDING

<u>CURRENT CROP</u>	<u>FUTURE CHANGES CONTEMPLATED</u>
Flax	" explore ways to speed up the collection of chaff piles "
Canola	" move to direct seeding of the crop "
Wheat	" improve residue management program, try a pre harvest application of Roundup, and begin seeding and harvesting earlier"
Wheat	" try broadcasting cereals to improve the uniformity of seed depth, and going back to using anhydrous NH <sub>3</sub> rather than dry fertilizer"
Barley	" modifying the rotary harrows to anchor more straw "
Fallow	" purchasing a cultivator that efficiently clears high residue areas"
Fallow	" increasing zero till summerfallow seeding "
Fall Rye	" placing a quarter of the rotation into fall seeded crop to maximize spring moisture levels, planting forages for seed production, and seeding fall crops into standing barley and canola stubble "



## TYPE OF TILLAGE: REDUCED

<u>CURRENT CROP</u>	<u>FUTURE CHANGES CONTEMPLATED</u>
Alfalfa	" adding peas to the rotation "
Alfalfa	" extending the rotation by adding alfalfa and seeding more acres as recommended by the Dryland Salinity Investigation "
Alfalfa	" converting to zero tillage when appropriate equipment is available"
Barley	" purchasing an air seeder and trying direct seeding "
Barley	" using an injection system for fertilizer that works with minimal disturbance "
Barley	" reducing tillage speed and increasing the use of chemical fallow"
Barley	" upgrading some tillage equipment such as cultivation shovels and trying some new rotary harrows "
Barley	" experimenting with direct seeding "
Barley	" incorporating legumes into the crop rotation and reducing the number of tillage passes "
Canola	" finding a more efficient way to use the Brandt rotary harrows in high trash areas "
Canola	" trying to seed peas with a zero till seed drill "
Canola	" converting to zero tillage, saving the chaff and then spreading it when not baling the straw"
Canola	" reducing my tillage speed, and increasing the amount of chem fallow"
Canola	" using spraying more as my weed control program on summerfallow"
Clover Incorp.	" moving more towards minimum till seeding"

Fallow	" using an injection system for fertilizer that disturbs the soil very little"
Fallow	" incorporating legumes into my crop rotation which I hope to lengthen and continuing to explore ways to eliminate the need for summerfallowing"
Fallow	" reducing my tillage speed and making spraying adjustments in the fallow year"
Peas	"shortening my rotation to include 25% fallow for weed control purposes and reducing my fertilizer requirements"
Peas	" purchasing a Phoenix Harrow to use for straw management in the spring and considering the use of more Roundup"
Peas	" depending upon my soil nitrogen levels direct seeding barley into pea stubble and using more erect standing peas for easier harvest"
Wheat	" eliminating the use of fallow and trying one pass seeding"
Wheat	" possibly adding more summerfallow"
Wheat	" exploring the possibility of using more chem fallow to allow for additional crop varieties to be used in the future"
Wheat	" reducing the number of tillage passes further and purchasing an air seeder"
Wheat	" switching to a continuous cropping system if moisture conditions stay the same or improve"
Wheat	" incorporating legumes into my crop rotation which I hope to lengthen and continuing to explore ways to eliminate the need for summerfallowing"

## **G. THE MACHINERY COMPLEMENT IN CONSERVATION TILLAGE**

In a zero tillage or direct seeding system a producer requires a seed drill able to work well under adverse conditions. This is particularly true when large amounts of crop residue increase the likelihood of plugging or hairpinning. Also a proper seed drill must penetrate the ground and place the seed at the proper depth.

During the past few years there has been much progress made since the first modifications of the double disc press drills which were the first no till drills. Today's drills are more reliable and efficient than those in the past.

There is no simple answer to the question of what is the best zero till drill as no single machine meets the needs of all producers. This is true of the producers involved in the SE program. For the 14 producers involved in direct seeding 7 are using air seeders, 5 use hocdrills, and 2 use a hoedrill with banding capability (Table 5).

One major characteristic of direct seeding systems is the need to have a large power unit to seed properly. The average size tractor in the SE program is about 272 HP and pulls a 31 ft. seeder over about 1600 acres.

A sprayer and cultivator round out the central pieces of equipment used in the system. Average widths for the sprayer and cultivators were 70 ft and 39 ft respectively.

Table 5 also provides a cooperator profile page number that cross references this information here with that provided about the system and costs and returns data found in Appendix One.

**TABLE 5: MAJOR MACHINERY COMPLEMENT IN ZERO TILLAGE 1988-1992**

Location	Soil Type	Acres Seeded	Main Tractor	HP	Seed Drill	Width	Sprayer Width	Cultivator Width	Cooperator Profile Page Number
Manning	Grey Wooded	1240	Versatile 875	280	Zerotill Drill	20	70	N/A	not available
Bonanza	Grey Wooded	1565	John Deere 8440	180	Haybuster 1000	20	70	25	not available
Warburg	Grey Wooded	670	John Deere 8630	300	Conservapac	27.5	56	N/A	A107-108
Viking	Thin Black	775	John Deere 8430	250	Haybuster	16	66	N/A	A87-88
Wainwright	Thin Black	1880	John Deere 8650	290	Haybuster	24	60	44	A89-90
Daysland	Thin Black	1180	John Deere 4850	192	John Deere 610 Airseeder	31	84	31	A63-64
Lomond	Brown	1000	Süeiger 9170	335	Seed-O-Vator	42	100	62	A19-20
Grassy Lake	Brown	1270	John Deere 8640	250	Flexicoil Concord	28 40	68	47	A7-8
Hanna	Dark Brown	475	Case 4490	180	Victory Airseeder	28	50	29	A25-26
Rosedale	Dark Brown	1640	Case IH 9180	370	Flexicoil	43	100	47	A27-28
Drumheller	Dark Brown	2350	Versatile 875	280	Flexicoil	39	82	40	A51-52
Strathmore	Dark Brown	2700	Case 9170	350	Victory Airseeder	38	50	36	A29-30
Brownfield	Dark Brown	2220	Versatile 895	310	Versatile 2200 Hoe Drill	35	70	41	A69-70
Lethbridge	Dark Brown	3200	John Deere 8640	230	Flexicoil	33	60	30	A15-16
Average		1,583		271.2		30.75	70.4	39.3	



## **H. IS WEED CONTROL A PROBLEM – PRODUCER FEEDBACK**

The differences between a conventional and zero tillage system are most apparent in the area of weed control. Controlling weeds without tillage is a major challenge facing producers who opt for a conservation farming system. And the success of any system in the long term is heavily dependent upon the ability of producers to obtain good weed control.

There are many factors that a producer can use to control weeds. Time of seeding, variety selection, optimum placement of seed and fertilizer, field border sanitation, and the selection and rotation of crops are just some. All are important in improving a crop's ability to compete with weeds. However the major control method utilized by producers involves herbicides.

Usually perennial weeds such as Canada thistle, quackgrass, and foxtail barley can be a concern when tillage is reduced. Producers tend to control these weeds in the fall using a glyphosate herbicide such as Roundup. Winter annuals such as stinkweed and slixweed are controlled using phenoxy herbicides. The following page presents an overview of the weed control success used by the 14 zero tillage producers in Systems Evaluation (Table 6).

Spring weed control can involve the use of glyphosate alone or mixed with a bronoxynil or dicamba to improve broadleaf weed control. Once the crop has emerged weeds are treated with post emergent herbicides as is the case with conventionally tilled and seeded crops.

Producers using direct seeding in the SE program generally feel good about the success they have had in controlling weeds. Of the 17 wheat-on-stubble fields that have been grown under direct seeding systems since 1988, 7 use a fall burn off and 5 incorporate a pre seed herbicide. With the exception of a producer in the Lethbridge area all use post emergent spraying to control weeds with 3 producers using two spray passes. Generally the results as judged by the producers involved have been good to excellent.

TABLE 6: FIELD CROP WEED ASSESSMENT IN ZERO TILLAGE (WHEAT ON STUBBLE) 1988 – 1992

Location	Soil Type	Fall Spray			Pre-Seed Spray			Post Seed Spray		
		No.	Chemical Used	Weed Control Assessment	No.	Chemical Used	Weed Control Assessment	No.	Chemical Used	Weed Control Assessment
Manning	Grey Wooded				1	Rustler	good	1	Assert/ 2,4-D	good
Manning	Grey Wooded							2	Rustler Assert/2,4-D	good good
Manning	Grey Wooded							2	Rustler 2,4-D Ester	good excellent
Bonanza	Grey Wooded							2	Hoegrass Avenge/Ally	poor excellent
Warburg	Grey Wooded				1	Roundup	good	1	Triumph	good
Viking	Thin Black				1	Roundup	excellent	1	Ally/Banvel	fair
Wainwright	Thin Black				1	Roundup	good	1	Banvel/ Triumph	excellent
Daysland	Thin Black	1	Roundup	fair				1	Triumph	excellent
Lomond	Brown							1	Rustler	excellent
Lethbridge	Dark Brown	1	Rustler	good	1	Rustler/ Banvel	good			
Strathmore	Dark Brown							1	Ally/2,4-D	good
Strathmore	Dark Brown	1	Fortress	good				1	Ally/2,4-D	good
Strathmore	Dark Brown	1	Roundup	good				1	Hoegrass II/ MCPA	good
Strathmore	Dark Brown	1	Roundup	good				1	Dyvel	good
Strathmore	Dark Brown	1	Roundup	excellent				1	Triumph	excellent
Strathmore	Dark Brown	2	Roundup Fortress	excellent excellent				1	Dyvel	good
Drumheller	Dark Brown							1	2,4-D Ester	excellent

## **I. CONSERVATION FARMING SAVES PRODUCERS TIME**

Farmers know that conservation farming can save time. But how much? To measure the savings an analysis of the field operations by tillage system was undertaken. The final conclusions— a producer could save as much as 33% of his time if a reduced tillage system was adopted rather than continuing to use conventional tillage practices. For zero tillage systems the labour savings were measured to be as high as 50%.

An analysis of the time spent on various field operations was performed on the 78 wheat fields that represent the major crop in the SE database. By selecting the crop with the most information in the database more confidence could be placed on the results obtained.

The analysis involved calculating the amount of operator time involved for all types of field operations within the three major types of tillage systems, conventional, reduced and zero. The results are summarized below.

**TABLE 7: FIELD OPERATION HOURS BY TILLAGE TYPE**

<b>Tillage</b>	<b>Average Size of Field</b>	<b>Number of Hours Labour</b>	<b>Mins/Acre</b>
Conventional	127	63.15	29.8
Reduced	93	29.22	18.9
Zero	160	37.70	14.1

The results indicate that average field size for conventional farm operations was 127 acres and that this size of field required 63.15 hours of labour. This was the amount of time involved in all field operations including tillage, spraying, seeding, swathing and combining. On a per acre basis this represented 29.8 minutes of labour per field acre. This amount of time was 58% higher or about 11 minutes more per acre than the 18.9 minutes required by producers practising reduced tillage. It also was over twice as much time as that required in zero tillage systems.

For producers these times can serve as benchmarks for estimating the amount of time that will be saved if a change to a different tillage practice is considered. If, for example, a producer is farming 1500 acres then a move to a reduced tillage system will save this operator about 270 hours of time. For a zero tillage or direct seeding operation these savings increase to about 390 hours. These level of savings point to an obvious advantage if conservation tillage practices are adopted.

However it should be kept in mind that labour is only one component in a range of conditions that affect the success of conservation farming. Flexibility, management capability, attitude and ease of using unfamiliar equipment are other factors that are just as important to the success. The analysis does indicate however that gains are to be made in the labour area for those producers who can make these adjustments.



The data was further analyzed as to the various types of field operations involved with each type of tillage system. Not only should the total number of passes be lower in zero tillage compared to conventional but less field time may be required as a result of a different mix of field operations. As expected the major differences occur in the trade off between tillage and spraying operations. Conventional tillage systems on average have more tillage passes per field than the other two systems. In contrast zero tillage operations substitute spraying operations for tillage. A complete breakdown of the average number of field operations involved in each of the three systems is given below (Table 8).

**TABLE 8: FIELD OPERATIONS BY TILLAGE SYSTEM**  
**Wheat on Stubble – 1988–1992**

Type of Operation	Conv. Tillage	Reduced Tillage	Zero Tillage
	Average Number of Passes per Field		
Fall Tillage	.90	.36	0
Fall Spray	.00	.17	0
Fall Fertilizing	.20	.49	0
Pre–seed Tillage	1.70	.57	0
Pre–seed Harrow	.80	.00	.00
Pre–seed Spray	.00	.25	.5
Seeding*	1.0	1.0	1.0
Harrowing	.40	.45	0
Post–seed Spray	1.1	1.0	1.2
Swathing	.40	.53	.1
Combining	1.0	1.0	1.0
<b>TOTAL PASSES</b>	<b>7.50</b>	<b>5.82</b>	<b>3.8</b>

\* A seeding pass includes operations where fertilizer and harrow packing may be part of the total seeding operation

Conventional farmers, on average, had almost 3 tillage passes prior to seeding compared to the about one tillage pass observed in reduced tillage. Of course zero tillage or direct seeding operations had no tillage passes. This trend was similar but less pronounced when it came to spraying operations. Conventional tillage operations on average were more likely to spray in the fall while zero tillage operators had a higher rate of spraying prior to seeding. One of every two operators involved in zero tillage operation sprayed in the spring prior to seeding. Only one operator in four with a reduced tillage system sprayed prior to seeding. Conventional tillage operators did not spray at all prior to seeding. Taken together, total spraying operations for the fall, pre and post seeding time periods for conventional, reduced and zero tillage operations were 1.1, 1.42, and 1.7 passes respectively.

Other notable differences were observed. Conventional and reduced tillage operations tended to fertilize in the fall, harrow both prior and after seeding, and swath more frequently than those under zero tillage. Although these differences were not significant they did contribute to an overall cost increase per acre for these two systems compared to zero tillage type systems.

When considering all field operations conventional tillage systems had 7.5 passes per field in the production of wheat. This was about 2 more passes per field than that observed for reduced tillage operations. It also represented about 4 more passes than under zero tillage operations.

## **J. THE ECONOMICS OF CONSERVATION TILLAGE**

One question often asked by farmers considering a change in tillage method is:

"What will it do to my bottom line?".

Using the information collected during the six years it is possible to evaluate the impact of reduced and zero tillage systems on input costs. Conventional tillage costs were estimated using data contained in the crop production database of the Production Economics Branch. This database collects data from about 150 crop producers in the province each year. Many of these operators include summerfallow in their crop rotation. In comparing the three systems the analysis only considered those fields where wheat was being produced on stubble.

One thing becomes clear. There are only two inputs that change very much as farmers change their tillage practices. These are the cost of herbicides and the cost of field operations, which includes all trips across the field involving tillage, spraying, seeding, swathing and combining. All other direct inputs, such as seed, seed cleaning, fertilizer are affected less by any change in tillage. And indirect costs such as land are not affected at all by tillage changes.

A breakdown of the various costs involved for the three major tillage systems is shown below.

**TABLE 9: COSTS OF WHEAT PRODUCTION BY TILLAGE SYSTEM  
(1988–1992)**

<b>Cost</b>	<b>Conv. Tillage</b>	<b>Reduced Tillage</b>	<b>Zero Tillage</b>
	<b>\$/acre</b>		
Herbicides	8.41	11.94	15.69
Fertilizer	16.22	13.73	14.23
Field Oper.	14.53	12.18	10.03
Fixed Costs	11.74	11.91	11.79
Other Costs	10.56	9.28	7.12
<b>TOTAL COSTS</b>	<b>61.46</b>	<b>59.04</b>	<b>58.86</b>

Herbicide costs increase in conservation tillage systems. The results of the analysis show that these costs in zero till operations are \$7.28 per acre higher compared to conventional systems. Conversely, field operations are \$4.50 per acre lower with zero tillage systems.

In comparing the systems in total, there is a \$2.60 per acre advantage for zero till over the conventional tillage systems.

It is logical then, if a net reduction in cost of this size can be achieved, and equal or better yields can be maintained, producers will get an increased net profit. This has been the case for many conservation tillage farmers in Alberta.



## **K. SHOULD PRODUCERS MAKE A CHANGE TO CONSERVATION TILLAGE**

Based on the above costs, a question many producers may be asking themselves is:

"If there is a \$2.60 savings per acre in zero till operations, should I make a commitment to buy new equipment and change the way I farm?".

As indicated previously, many factors in addition to economics should be considered by any producer prior to making any change. Producers must be willing to be flexible and adapt as new and unexpected challenges develop in the way they farm. An inability to address these challenges effectively could mean the difference between success and failure. Therefore the average gross returns per acre provided in this analysis may not be achievable on an on going basis.

However assuming a producer can make the required changes successfully how can the knowledge of a gross return advantage of \$2.60 per acre be used for future planning? In the short term this knowledge may not be that important. Producers will be concerned with cash flow and their ability to retire debts without the need for borrowing to offset month to month variations in income or expenses. In the longer term however producers will assess the economic advantages of a zero or reduced till system in the context of the discounted net present value of the stream of additional income resulting from the change. By applying a discount rate of return on an annual basis, usually the prime interest rate at the time of the analysis, it is possible to determine the value of these returns over the life of an investment. In most cases the major change required to be a successful conservation farmer is the purchase of a drill since seedbed preparation is critical for any success. This information can form the basis for calculating the feasibility of moving to a conservation tillage system.

For example assume a producer is cropping 1500 acres per year and is considering the purchase of a new drill for direct seeding purposes. Assume as well

that the interest rate for any farm loan is 7.5%, and the expected equipment life of the drill is 15 years. What's the most that the producer can afford to pay for the purchase of the new drill?

The answer is \$35,400 if the producer can obtain a \$2.60 per acre advantage under zero tillage. At this amount the producer's cost for the loan equals the discounted net present value of \$3900 over the 15 years of the lifetime of the drill.

This amount is likely not enough in view of the current price of direct seeding equipment. A 33 ft drill which is appropriate for this size of farm costs about \$65,000. The producer therefore has a shortfall of about \$30,000.

The difference can be covered in three ways. Firstly no allowance has been made for a trade in of the existing drill. This may make up the difference. If not a second option must be considered. It may be possible for the producer to trade in not only the drill but sell a second tractor in view of the reduced horse power requirements of direct seeding system. Or third the producer may be able to couple this modest savings per acre with the reduced time required for direct seeding. As a result this producer may be in a position to crop more acres with the same amount of labour and time.

Using the same assumptions above and the time saved in zero till systems, this producer could increase the number of cropped acres to about 2500. At this point both time and the economic advantages of the zero till system are no different than the existing situation. Total revenue is higher however, as a result of the increase in field size.

Of course the major assumption behind this analysis pertains to yield. It is implicitly assumed that the producer is able to achieve the same yields under zero till as was possible under conventional tillage. Preliminary results from the two databases used in this study indicates there appears to be little difference. However insufficient data for each of the various soil and moisture conditions makes it difficult to draw any firm conclusions. It does appear, however, that zero till yields may be better than conventional where moisture stress is a problem. This seems to be less of an advantage

where moisture levels are normal or ample during the growing season. Producers in the Manitoba–North Dakota Zero Till Association indicate yields can in most cases better the conventional tillage norm. In Alberta results to date are mixed and do not indicate as strong a trend towards increased yields under zero tillage systems.

## L. CONCLUSIONS

In view of the information presented here producers now have to ask themselves if conservation farming is in their future. There is no straight forward answer. If producers feel that to continue their current system of farming would contribute to increased soil degradation then they should consider changing. If, on the other hand, they feel the challenges to conservation farming may be more than they feel comfortable with or there are still too many questions to be answered then it may be beneficial for them to delay any changes. In any event any decision ultimately reached must be one that is comfortable to the producer. Producers who are hesitant are encouraged to attend local field days and conservation farming conferences. More importantly they are encouraged to talk to producers who are actively practising conservation farming. They are the best people to discuss the merits of the complete conservation farming concept.

The economic results presented here indicates there is a net returns advantage to adopting conservation farming systems if yields are comparable. These conclusions have been made after an analysis of the data for reduced and zero tillage systems on the Systems Evaluation program. The conventional tillage data was drawn from a sample of the about 150 producers in the Crop Production database within the Branch. The producers selected for the three systems were from the same locales for the same crop year. Although this minimizes the variability of the data for soil type and moisture availability it is not totally eradicated. A larger sample size would improve the confidence placed in the results. Therefore producers are cautioned to supplement the results presented here with those received from other sources including fellow producers.

As participation levels grow in the SE program, data will be become available that permits additional analysis to be undertaken. This analysis will better be able to account for soil and climate differences in the data. Notwithstanding this the results presented here are representative of the activities and costs observed within the three types of tillage systems. We feel confident about the general direction of the economic trends outlined. With more information the magnitude of the savings involved could change over time.



## **APPENDIX I**

The following pages present information about the 61 producers who participated in the Systems Evaluation program during 1992.

An overview of their farming operation, conservation system and goals is presented.

On the opposite page is an economic history of the costs and returns obtained on this field over the past six years.

The information is grouped by Region.



**LOCATION:**

5 miles north of  
Mossleigh

**COOPERATOR PROFILE**

ID# : 107-92-11

**FARM DESCRIPTION:**

The cooperator has a 3740 acre farm with economic and agronomic data being supplied from a 160 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a dark brown type, of coarse texture, on land classified as gently rolling. Organic matter content is 4.0%.

The cooperator feels that there is potential for salinity problems on this field. However water and wind erosion possibilities are also felt to be low and high respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
wheat	barley	barley	barley

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the need to reduce soil salinity. Conservation goals are to reduce wind erosion, improve seedbed moisture, improve soil organic matter, and increase crop yields.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from proper moisture management. Reduced cultivation and the proper management of straw have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the variable climate in the area.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to incorporate legumes into the crop rotation and reduce the number of tillage passes.

Economic Summary for (Code#:107) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Barley	Barley	-----
Yield .....					60.00	32.00	-----
Price .....					1.50	1.08	-----
<b>TOTAL .....</b>					<b>90.00</b>	<b>34.56</b>	<b>62.28</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					3.75	3.00	3.38
Seed treatment .....					.75	1.36	1.06
Fertilizer .....					14.30	12.76	13.53
Crop insurance .....					4.00	4.00	4.00
Herbicide .....					1.75	21.80	11.78
Insecticide .....					0.00	0.00	0.00
Repairs .....					7.25	12.95	10.10
Fuel, Oil and Lube...					2.73	3.82	3.27
Machine rent./cust.					.00	2.50	1.25
Hired labour .....					0.00	0.00	0.00
Operating interest ..					1.44	1.87	1.65
<b>TOTAL .....</b>					<b>35.97</b>	<b>64.06</b>	<b>50.01</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					4.43	8.41	6.42
Capital Opp. Cost ...					3.93	5.41	4.67
Insurance, housing ..					1.34	1.86	1.60
<b>TOTAL .....</b>					<b>9.70</b>	<b>15.68</b>	<b>12.69</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>45.67</b>	<b>79.74</b>	<b>62.70</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>54.03</b>	<b>-29.50</b>	<b>12.27</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>44.33</b>	<b>-45.18</b>	<b>- .42</b>



**LOCATION:**

5 miles north of  
Mossleigh

**COOPERATOR PROFILE**

ID# : 107-92-21

**FARM DESCRIPTION:**

The cooperator has a 3740 acre farm with economic and agronomic data being supplied from a 160 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as gently rolling.

The cooperator feels that there is potential for salinity problems on this field. However water and wind erosion possibilities are also felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
fallow	mustard	wheat	wheat	fallow	mustard	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the need to reduce wind erosion. Conservation goals are to improve seedbed moisture, improve soil organic matter, increase crop yields, and increase subsoil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from proper moisture management. Reduced cultivation and the proper management of straw have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the variable climate in the area.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to incorporate legumes into the crop rotation and reduce the number of tillage passes.

Economic Summary for (Code#:107) Rotation #:2 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Fallow	Mustard	Wheat	-----
Yield .....				0.00	21.00	47.00	-----
Price .....				0.00	5.50	1.85	-----
<b>TOTAL .....</b>				<b>0.00</b>	<b>115.50</b>	<b>86.95</b>	<b>67.48</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				0.00	1.98	4.50	2.16
Seed treatment .....				0.00	0.00	.78	.26
Fertilizer .....				0.00	13.20	8.50	7.23
Crop insurance .....				0.00	4.00	4.00	2.67
Herbicide .....				0.00	16.55	2.00	6.18
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				2.51	6.98	13.98	7.82
Fuel, Oil and Lube...				2.24	3.95	3.72	3.30
Machine rent./cust.				.00	2.50	.00	.83
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				.22	2.87	1.11	1.40
<b>TOTAL .....</b>				<b>4.98</b>	<b>52.03</b>	<b>38.58</b>	<b>31.86</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				.00	5.46	7.21	4.22
Capital Opp. Cost ...				2.33	5.36	5.13	4.27
Insurance, housing ..				.76	1.80	1.76	1.44
<b>TOTAL .....</b>				<b>3.09</b>	<b>12.62</b>	<b>14.10</b>	<b>9.94</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>8.07</b>	<b>64.65</b>	<b>52.68</b>	<b>41.80</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>-4.98</b>	<b>63.47</b>	<b>48.37</b>	<b>35.62</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>-8.07</b>	<b>50.85</b>	<b>34.27</b>	<b>25.68</b>

**LOCATION:**

6 miles northeast  
of Grassy Lake

**COOPERATOR PROFILE**

ID# : 108-92-11

**FARM DESCRIPTION:**

The cooperator has a 4940 acre farm with economic and agronomic data being supplied from a 20 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a dark brown type, of coarse texture, on land classified as gently rolling.

The cooperator feels that there is no potential for salinity problems on this field. However water and wind erosion possibilities are felt to be low and high respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995
durum	fallow	winter wheat	fallow	barley	fallow

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase crop yields. Conservation goals are to reduce wind erosion, improve seedbed moisture, increase subsoil moisture, and to increase profits.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from the limited amount of time for which field moisture levels are favourable for planting. Reduced cultivation and the use of chemicals which allow for more surface trash on the field have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the current low prices being received for most commodities.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to increase no till summerfallow seeding.

Economic Summary for (Code#:108) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Fallow	Winter w	-----
Yield .....					0.00	38.00	-----
Price .....					0.00	2.38	-----
<b>TOTAL .....</b>				<b>109.44</b>	<b>0.00</b>	<b>90.44</b>	<b>49.97</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				7.50	0.00	4.02	2.88
Seed treatment .....				1.00	0.00	.70	.43
Fertilizer .....				6.49	0.00	8.42	3.73
Crop insurance .....				0.00	0.00	4.60	1.53
Herbicide .....				4.85	5.95	2.15	4.61
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				5.52	1.02	2.69	2.52
Fuel, Oil and Lube...				.36	1.74	.55	.76
Machine rent./cust.				.00	.00	6.50	1.63
Hired labour .....				3.60	0.00	1.20	2.10
Operating interest ..				.45	.41	1.54	1.04
<b>TOTAL .....</b>			<b>10.82</b>	<b>31.10</b>	<b>9.12</b>	<b>32.36</b>	<b>20.85</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			.93	3.43	1.00	2.13	1.87
Capital Opp. Cost ...			1.81	2.60	2.39	1.27	2.02
Insurance, housing ..			.59	.89	.78	.44	.67
<b>TOTAL .....</b>			<b>3.32</b>	<b>6.93</b>	<b>4.17</b>	<b>3.85</b>	<b>4.57</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>14.15</b>	<b>38.02</b>	<b>13.29</b>	<b>36.21</b>	<b>25.42</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-10.82</b>	<b>78.34</b>	<b>-9.12</b>	<b>58.08</b>	<b>29.12</b>
<b>RETURN TO LAND, LAB. &amp; MGNT</b>			<b>-14.15</b>	<b>71.42</b>	<b>-13.29</b>	<b>54.23</b>	<b>24.55</b>



**LOCATION:**

6 miles northeast  
of Grassy Lake

**COOPERATOR PROFILE**

ID# : 108-92-12

**FARM DESCRIPTION:**

The cooperator has a 4940 acre farm with economic and agronomic data being supplied from a 20 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a dark brown type, of coarse texture, on land classified as gently rolling. Organic matter content is 5,0%.

The cooperator feels that there is no potential for salinity problems on this field. However water and wind erosion possibilities are felt to be low and high respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage, direct seeding system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995
fallow	wheat	fallow	winter wheat	barley	fallow

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase crop yields. Conservation goals are to reduce wind erosion, improve seedbed moisture, increase subsoil moisture, and to increase profits.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from the limited amount of time for which field moisture levels are favourable for planting. Reduced cultivation and the use of chemicals which allow for more surface trash on the field have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the current low prices being received for most commodities.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to increase no till summerfallow seeding.

Economic Summary for (Code#:108) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Fallow	Wheat	Fallow	-----
Yield .....				0.00	49.00		-----
Price .....				0.00	2.00		-----
<b>TOTAL .....</b>				<b>0.00</b>	<b>98.00</b>	<b>0.00</b>	<b>32.67</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				0.00	4.20	0.00	1.40
Seed treatment .....				0.00	.55	0.00	.18
Fertilizer .....				0.00	7.04	0.00	2.35
Crop insurance .....				0.00	4.50		2.25
Herbicide .....				5.50	13.30	10.80	9.87
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				1.06	6.78	.23	2.69
Fuel, Oil and Lube...				.61	.98	.32	.64
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				0.00	4.00	0.00	1.33
Operating interest ..				.50	1.57	.34	.80
<b>TOTAL .....</b>				<b>7.66</b>	<b>42.92</b>	<b>11.69</b>	<b>20.76</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				1.07	4.09	.48	1.88
Capital Opp. Cost ..				2.38	5.30	.30	2.66
Insurance, housing ..				.77	1.79	.10	.89
<b>TOTAL .....</b>				<b>4.22</b>	<b>11.18</b>	<b>.88</b>	<b>5.43</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>11.89</b>	<b>54.10</b>	<b>12.57</b>	<b>26.18</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>-7.66</b>	<b>55.08</b>	<b>-11.69</b>	<b>11.91</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>-11.89</b>	<b>43.90</b>	<b>-12.57</b>	<b>6.48</b>

**LOCATION:**

15 miles southeast  
of Taber

**COOPERATOR PROFILE**

ID# : 121-92-11

**FARM DESCRIPTION:**

The cooperator has a 4480 acre farm with economic and agronomic data being supplied from a 106 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as gently rolling. Organic matter content is 3.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to be low and moderate respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	fallow	wheat	fallow	wheat	fallow	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase crop yields. Conservation goals are to reduce wind erosion, increase profits, improve soil organic matter, and to reduce perennial weed problems.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from reducing cultivation. Timeliness of undertaking field operations and the proper use of chemicals have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the low commodity prices available to producers because this places added risk in the adoption of alternative farming methods.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator is not planning any future changes.

Economic Summary for (Code#:121) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Wheat	-----
Yield .....						52.00	-----
Price .....						1.86	-----
<b>TOTAL .....</b>				<b>99.20</b>	<b>0.00</b>	<b>96.72</b>	<b>48.98</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				4.02	0.00	8.00	3.01
Seed treatment .....				1.25	0.00	1.90	.79
Fertilizer .....				8.00	0.00	7.00	3.75
Crop insurance .....				4.50	0.00	4.53	2.26
Herbicide .....			18.12	4.62	11.90	3.00	9.41
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			1.92	8.78	1.12	8.96	5.19
Fuel, Oil and Lube...			2.33	2.53	.91	1.93	1.93
Machine rent./cust.			.00	.00	.00	9.00	2.25
Hired labour .....			3.96	3.96	0.00	0.00	1.98
Operating interest ..			1.08	1.90	.48	1.32	1.19
<b>TOTAL .....</b>			<b>27.41</b>	<b>39.55</b>	<b>14.41</b>	<b>45.65</b>	<b>31.75</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			1.32	2.63	.53	2.52	1.75
Capital Opp. Cost ....			1.15	1.85	.64	2.01	1.41
Insurance, housing ..			.38	.63	.21	.69	.48
<b>TOTAL .....</b>			<b>2.85</b>	<b>5.11</b>	<b>1.39</b>	<b>5.22</b>	<b>3.64</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>30.26</b>	<b>44.66</b>	<b>15.80</b>	<b>50.87</b>	<b>35.40</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-27.41</b>	<b>59.65</b>	<b>-14.41</b>	<b>51.07</b>	<b>17.23</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>-30.26</b>	<b>54.54</b>	<b>-15.80</b>	<b>45.85</b>	<b>13.58</b>



**LOCATION:**

15 miles southeast  
of Taber

**COOPERATOR PROFILE**

ID# : 121-92-12

**FARM DESCRIPTION:**

The cooperator has a 4480 acre farm with economic and agronomic data being supplied from a 100 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a brown type, of medium texture, on land classified as gently rolling. Organic matter content is 3.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to be low and moderate respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
fallow	wheat	fallow	wheat	fallow	wheat	fallow

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase crop yields. Conservation goals are to reduce wind erosion, increase profits, improve soil organic matter, reduce perennial weed problems, and to increase profits.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from reducing cultivation. Timeliness of undertaking field operations and the proper use of chemicals have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the low commodity prices available to producers because this places added risk in the adoption of alternative farming methods.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator is not planning any future changes.

Economic Summary for (Code#:121) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Fallow	Wheat	Fallow	-----
Yield .....				0.00	35.00	0.00	-----
Price .....				0.00	2.00	0.00	-----
<b>TOTAL .....</b>				<b>0.00</b>	<b>70.00</b>	<b>0.00</b>	<b>23.33</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				0.00	3.15	0.00	1.05
Seed treatment .....				0.00	3.50	0.00	1.17
Fertilizer .....				0.00	0.00	0.00	0.00
Crop insurance .....				0.00	4.92		2.46
Herbicide .....				20.00	1.50	11.90	11.13
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				1.29	8.35	.76	3.47
Fuel, Oil and Lube...				1.04	2.76	.85	1.55
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				0.00	.84	0.00	.28
Operating interest ..				1.28	.91	.35	.84
<b>TOTAL .....</b>				<b>23.61</b>	<b>25.93</b>	<b>13.87</b>	<b>21.14</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				.96	1.99	1.46	1.47
Capital Opp. Cost ...				.76	1.82	.87	1.15
Insurance, housing ..				.26	.62	.29	.39
<b>TOTAL .....</b>				<b>1.98</b>	<b>4.43</b>	<b>2.61</b>	<b>3.01</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>25.59</b>	<b>30.36</b>	<b>16.48</b>	<b>24.14</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>-23.61</b>	<b>44.07</b>	<b>-13.87</b>	<b>2.20</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>-25.59</b>	<b>39.64</b>	<b>-16.48</b>	<b>-.81</b>

**LOCATION:**

5 miles east of  
Foremost

**COOPERATOR PROFILE**

ID# : 124-92-12

**FARM DESCRIPTION:**

The cooperator has a 7400 acre farm with economic and agronomic data being supplied from a 160 acre field. This cooperator has one field enrolled on the Systems Evaluation program.

The soil is a brown type, of medium texture, on land classified as gently rolling. Organic matter content is 3.0%.

The cooperator feels that there is potential for salinity problems on this field. However water and wind erosion possibilities are felt to be moderate and high respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
durum	durum	wheat	fallow	canola	winter wheat	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Conservation goals are to reduce wind erosion, improve soil organic matter, and to improve time management.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his machinery (airseeder conserved moisture and speeded up the operation). Moisture management and timeliness have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to add more summerfallow.

Economic Summary for (Code#:124) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Durum	Durum	Wheat	-----
Yield .....				34.00	34.00	23.00	-----
Price .....				2.90	1.75	2.00	-----
<b>TOTAL .....</b>				<b>98.60</b>	<b>59.50</b>	<b>46.00</b>	<b>68.03</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				5.03	4.80	3.03	4.28
Seed treatment .....				.44	.50	1.00	.65
Fertilizer .....				16.24	9.00	7.20	10.81
Crop insurance .....				6.00	3.00	3.50	4.17
Herbicide .....				4.10	5.75	12.40	7.42
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				3.78	7.05	10.08	6.97
Fuel, Oil and Lube....				1.15	1.11	1.56	1.27
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				0.00	.63	0.00	.21
Operating interest ..				2.74	1.25	1.26	1.75
<b>TOTAL .....</b>				<b>39.48</b>	<b>33.08</b>	<b>40.03</b>	<b>37.53</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				3.29	3.45	3.52	3.42
Capital Opp. Cost ...				1.48	1.49	2.25	1.74
Insurance, housing ..				.50	.51	.77	.60
<b>TOTAL .....</b>				<b>5.27</b>	<b>5.46</b>	<b>6.55</b>	<b>5.76</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>44.75</b>	<b>38.54</b>	<b>46.57</b>	<b>43.29</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>59.12</b>	<b>26.42</b>	<b>5.97</b>	<b>30.50</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>53.85</b>	<b>20.96</b>	<b>-.57</b>	<b>24.75</b>



## COOPERATOR PROFILE

ID# : 126-92-12

## FARM DESCRIPTION:

The cooperator has a 3300 acre farm with economic and agronomic data being supplied from a 620 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as gently rolling. Organic matter content is 4.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to be low and high respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is a zero tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	canola	winter wheat	wheat	canola	winter wheat	wheat

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to reduce wind erosion. Conservation goals are to improve seedbed moisture, increase profits, improve soil organic matter, and to improve time management.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from good management. Experience and reduced cultivation have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the climatic factors prevalent in the area.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to reduce costs while trying to increase yields.

Economic Summary for (Code#:126) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....			Wheat	Wheat	Canola	Winter w	-----
Yield .....			28.00	22.00	18.00	12.00	-----
Price .....			4.65	3.15	5.70	2.03	-----
<b>TOTAL .....</b>			<b>130.20</b>	<b>69.30</b>	<b>102.60</b>	<b>24.36</b>	<b>81.62</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			6.96	4.51	5.01	4.02	5.12
Seed treatment .....			1.10	.32	2.75	0.00	1.04
Fertilizer .....			18.65	9.52	9.00	7.32	11.12
Crop insurance .....			0.00	6.30	4.00	2.90	3.30
Herbicide .....			13.20	21.99	11.52	3.60	12.58
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			3.67	9.50	11.24	6.15	7.64
Fuel, Oil and Lube...			1.44	1.47	2.03	1.80	1.69
Machine rent./cust.			.00	.00	.00	.00	.00
Hired labour .....			0.00	10.00	10.00	0.00	5.00
Operating interest ..			4.26	2.95	1.97	1.34	2.63
<b>TOTAL .....</b>			<b>49.28</b>	<b>66.56</b>	<b>57.52</b>	<b>27.13</b>	<b>50.12</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			.89	1.15	1.16	1.64	1.21
Capital Opp. Cost ...			.96	1.29	1.39	1.49	1.28
Insurance, housing ..			.32	.44	.47	.51	.43
<b>TOTAL .....</b>			<b>2.17</b>	<b>2.87</b>	<b>3.02</b>	<b>3.64</b>	<b>2.93</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>51.45</b>	<b>69.43</b>	<b>60.53</b>	<b>30.77</b>	<b>53.05</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>80.92</b>	<b>2.74</b>	<b>45.08</b>	<b>-2.77</b>	<b>31.49</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>78.75</b>	<b>-.13</b>	<b>42.07</b>	<b>-6.41</b>	<b>28.57</b>

**LOCATION:**

8 miles northeast  
of Claresholm

**COOPERATOR PROFILE**

ID# : 130-92-11

**FARM DESCRIPTION:**

The cooperator has a 2700 acre farm with economic and agronomic data being supplied from a 120 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as gently rolling. Organic matter content is 4.0%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are felt to be moderate and high respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995
wheat	wheat	wheat	barley	barley	barley

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase crop yields. Conservation goals are to increase profits, improve soil organic matter, control weeds, and to reduce soil salinity.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from good management. Machinery and chemicals have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to try some chemfallow to allow for the change of crop varieties in the future.

Economic Summary for (Code#:130) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Wheat	Wheat	Wheat	-----
Yield .....				27.00	35.00	11.00	-----
Price .....				3.20	2.12	1.78	-----
<b>TOTAL .....</b>				<b>86.40</b>	<b>74.20</b>	<b>19.58</b>	<b>60.06</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				5.52	4.90	5.25	5.22
Seed treatment .....				.84	.60	1.00	.81
Fertilizer .....				10.72	10.50	13.33	11.52
Crop insurance .....				5.00	3.00	4.00	4.00
Herbicide .....				3.75	13.33	9.99	9.02
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				3.87	2.87	5.52	4.09
Fuel, Oil and Lube...				1.91	2.97	3.06	2.65
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				2.08	2.08	2.08	2.08
Operating interest ..				1.80	1.62	1.44	1.62
<b>TOTAL .....</b>				<b>35.50</b>	<b>41.86</b>	<b>45.67</b>	<b>41.01</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				3.24	7.01	10.02	6.76
Capital Opp. Cost ...				4.18	3.32	4.03	3.84
Insurance, housing ..				1.40	1.12	1.39	1.30
<b>TOTAL .....</b>				<b>8.82</b>	<b>11.46</b>	<b>15.44</b>	<b>11.91</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>44.32</b>	<b>53.32</b>	<b>61.12</b>	<b>52.92</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>50.90</b>	<b>32.34</b>	<b>-26.09</b>	<b>19.05</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>42.08</b>	<b>20.88</b>	<b>-41.54</b>	<b>7.14</b>



**LOCATION:**

4 miles southwest  
of Lomond

**COOPERATOR PROFILE**

ID# : 131-92-11

**FARM DESCRIPTION:**

The cooperator has a 2100 acre farm with economic and agronomic data being supplied from a 80 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a brown type, of medium texture, on land classified as gently rolling. Organic matter content is 3.7%.

The cooperator feels that there is no potential for salinity problems on this field. However water and wind erosion possibilities are felt to be low.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
fallow	wheat	fallow	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to leave the land in good condition. Conservation goals are to reduce wind erosion, reduce water erosion, improve time management, and to increase profits.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from proper management. Chemicals and moisture management have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

For the time being no future changes have been planned by the cooperator.

Economic Summary for (Code#:131) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Fallow	Wheat	Fallow	-----
Yield .....				0.00	47.00	0.00	-----
Price .....				0.00	2.20	0.00	-----
<b>TOTAL .....</b>				<b>0.00</b>	<b>103.40</b>	<b>0.00</b>	<b>34.47</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				6.25	4.50	0.00	3.58
Seed treatment .....				.94	.70	0.00	.55
Fertilizer .....				9.00	10.40	0.00	6.47
Crop insurance .....				0.00	6.50		3.25
Herbicide .....				13.90	4.00	7.26	8.39
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				1.18	1.49	.82	1.16
Fuel, Oil and Lube...				2.64	3.43	.00	2.02
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				1.81	1.18	.22	1.07
<b>TOTAL .....</b>				<b>35.71</b>	<b>32.20</b>	<b>8.30</b>	<b>25.41</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				1.43	8.81	.27	3.51
Capital Opp. Cost ...				3.03	5.47	.13	2.88
Insurance, housing ..				.99	1.85	.04	.96
<b>TOTAL .....</b>				<b>5.45</b>	<b>16.14</b>	<b>.45</b>	<b>7.34</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>41.16</b>	<b>48.35</b>	<b>8.74</b>	<b>32.75</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>-35.71</b>	<b>71.20</b>	<b>-8.30</b>	<b>9.06</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>-41.16</b>	<b>55.05</b>	<b>-8.74</b>	<b>1.72</b>

**LOCATION:**

4 miles southwest  
of Lomond

**COOPERATOR PROFILE**

ID# : 131-92-12

**FARM DESCRIPTION:**

The cooperator has a 2100 acre farm with economic and agronomic data being supplied from a 80 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a brown type, of medium texture, on land classified as gently rolling. Organic matter content is 3.7%.

The cooperator feels that there is no potential for salinity problems on this field. However water and wind erosion possibilities are felt to be low.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
fallow	wheat	fallow	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to leave the land in good condition. Conservation goals are to reduce wind erosion, reduce water erosion, improve time management, and to increase profits.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from proper management. Chemicals and moisture management have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

For the time being no future changes have been planned by the cooperator.

Economic Summary for (Code#:131) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....							-----
Yield .....							-----
Price .....							-----
<b>TOTAL .....</b>							<b>49.48</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....							2.57
Seed treatment .....							.46
Fertilizer .....							2.06
Crop insurance .....							2.38
Herbicide .....							8.14
Insecticide .....							0.00
Repairs .....							1.02
Fuel, Oil and Lube...							.72
Machine rent./cust.							.94
Hired labour .....							0.00
Operating interest ..							.40
<b>TOTAL .....</b>							<b>18.68</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....							5.03
Capital Opp. Cost ...							2.43
Insurance, housing ..							.82
<b>TOTAL .....</b>							<b>8.28</b>
<b>TOTAL COST OF PRODUCTION .</b>							<b>26.96</b>
<b>CONTRIBUTION MARGIN .....</b>							<b>30.80</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>							<b>22.52</b>



**LOCATION:**

10 miles north of  
Fort MacLeod

**COOPERATOR PROFILE**

ID# : 146-92-21

**FARM DESCRIPTION:**

The cooperator has a 820 acre farm with economic and agronomic data being supplied from a 125 acre field. This cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as flat. Organic matter content is 2.5%.

The cooperator feels that there is potential for salinity problems on this field. However water erosion potential seems to be low while wind erosion possibilities seem to be high.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994
fall rye	fallow	wheat	barley	canola

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to reduce wind erosion. Conservation goals are to improve seedbed moisture, increase crop yields and profits, and to improve soil organic matter.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from reduced cultivation. Conservation management and straw management have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the impact of government programs on the decisions to be made in conservation farming.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to convert to a continuous cropping system if moisture conditions stay the same or improve.

Economic Summary for (Code#:146) Rotation #::2 Field #::1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Wheat	-----
Yield .....						9.10	-----
Price .....						1.79	-----
<b>TOTAL .....</b>						<b>16.29</b>	<b>28.07</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						4.35	2.59
Seed treatment .....						1.00	.25
Fertilizer .....						7.60	1.90
Crop insurance .....						3.00	2.80
Herbicide .....						3.60	8.30
Insecticide .....						0.00	0.00
Repairs .....						9.73	3.93
Fuel, Oil and Lube...						2.79	1.54
Machine rent./cust.						.00	.00
Hired labour .....						0.00	0.00
Operating interest ..						.87	.83
<b>TOTAL .....</b>						<b>32.94</b>	<b>21.43</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						1.91	1.09
Capital Opp. Cost ...						4.06	2.09
Insurance, housing ..						1.39	.71
<b>TOTAL .....</b>						<b>7.36</b>	<b>3.90</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>40.30</b>	<b>25.33</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>-16.65</b>	<b>6.64</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>-24.01</b>	<b>2.74</b>

**LOCATION:**

15 miles southwest  
of Hanna

**COOPERATOR PROFILE**

ID# : 103-92-11

**FARM DESCRIPTION:**

The cooperator has a 2715 acre farm with economic and agronomic data being supplied from a 46 acre field. This cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of coarse texture, on land classified as hilly. Organic matter content is 9.0%.

The cooperator feels that there is no potential for salinity problems on this field. However water erosion potential and wind erosion possibilities seem to be high.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a zero tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
canola	barley	fallow	canola	barley	fallow	canola

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Conservation goals are to reduce wind and water erosion, improve time management, and to increase subsoil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his machinery. Reduced cultivation and livestock have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the high cost of inputs.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator has no plans for any future changes.

Economic Summary for (Code#:103) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Canola	Barley	Fallow	-----
Yield .....				20.00	75.00	0.00	-----
Price .....				5.60	1.65	0.00	-----
<b>TOTAL .....</b>				<b>112.00</b>	<b>123.75</b>	<b>0.00</b>	<b>78.58</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				4.10	3.60	0.00	2.57
Seed treatment .....				2.40	1.25	0.00	1.22
Fertilizer .....				6.89	9.75	0.00	5.54
Crop insurance .....				0.00	2.18		1.09
Herbicide .....				8.19	2.00	2.56	4.25
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				.39	1.99	.26	.88
Fuel, Oil and Lube...				.98	5.35	.91	2.41
Machine rent./cust.				20.50	15.00	6.00	13.83
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				2.40	1.71	.26	1.46
<b>TOTAL .....</b>				<b>45.85</b>	<b>42.84</b>	<b>9.99</b>	<b>32.89</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				.23	.77	.24	.41
Capital Opp. Cost ...				.91	1.92	.16	1.00
Insurance, housing ..				.31	.66	.05	.34
<b>TOTAL .....</b>				<b>1.45</b>	<b>3.35</b>	<b>.45</b>	<b>1.75</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>47.30</b>	<b>46.18</b>	<b>10.44</b>	<b>34.64</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>66.15</b>	<b>80.91</b>	<b>-9.99</b>	<b>45.69</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>64.70</b>	<b>77.57</b>	<b>-10.44</b>	<b>43.94</b>



**LOCATION:**

6 miles northeast  
of Rosedale

**COOPERATOR PROFILE**

ID# : 106-92-11

**FARM DESCRIPTION:**

The cooperator has a 3957 acre farm with economic and agronomic data being supplied from a 85 acre field. This cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of fine texture, on land classified as gently rolling. Organic matter content is 6.4%.

The cooperator feels that there is no potential for salinity problems on this field. However water erosion potential and wind erosion possibilities seem to be low and high respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a zero tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
fallow	wheat	fallow	barley	fallow	wheat	fallow

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve the condition of the land. Conservation goals are to reduce wind erosion, improve soil organic matter, increase profits, and to improve seedbed moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his positive attitude. Machinery and proper straw and chaff management have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the current low prices for commodities.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to purchase a cultivator that more effectively handles areas of the field that have high crop residue.

Economic Summary for (Code#:106) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Fallow	Wheat	Fallow	-----
Yield .....				0.00	90.00		-----
Price .....				0.00	2.00		-----
<b>TOTAL .....</b>				<b>0.00</b>	<b>180.00</b>	<b>0.00</b>	<b>60.00</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				0.00	8.40	0.00	2.80
Seed treatment .....				0.00	2.50	0.00	.83
Fertilizer .....				0.00	21.12	0.00	7.04
Crop insurance .....				0.00	5.00	1.94	2.31
Herbicide .....				0.00	21.53	0.00	7.18
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				1.00	9.90	2.62	4.51
Fuel, Oil and Lube...				1.94	6.04	2.29	3.42
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				28.86	0.00	0.00	9.62
Operating interest ..				.14	4.88	.16	1.73
<b>TOTAL .....</b>				<b>31.94</b>	<b>79.38</b>	<b>7.01</b>	<b>39.44</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				3.17	6.11	2.33	3.87
Capital Opp. Cost ...				2.66	4.36	1.46	2.83
Insurance, housing ..				.91	1.49	.47	.96
<b>TOTAL .....</b>				<b>6.75</b>	<b>11.96</b>	<b>4.26</b>	<b>7.66</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>38.69</b>	<b>91.34</b>	<b>11.27</b>	<b>47.10</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>-31.94</b>	<b>100.62</b>	<b>-7.01</b>	<b>20.56</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>-38.69</b>	<b>88.66</b>	<b>-11.27</b>	<b>12.90</b>

## COOPERATOR PROFILE

ID# : 120-92-11

## FARM DESCRIPTION:

The cooperator has a 4600 acre farm with economic and agronomic data being supplied from a 235 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as gently rolling. Organic matter content is 6.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be low.

## CONSERVATION SYSTEM DESCRIPTION:

This is a zero tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	wheat	barley	barley	canola	wheat	wheat

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the need to reduce wind erosion. Conservation goals are to increase seedbed and subsoil moisture, and to increase crop yields and profits.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from his open attitude towards change. Management ability and experience have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented challenge is the lack of funds with which to make the necessary changes.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to modify the rotary harrows to try and preserve more straw on the field.

Economic Summary for (Code#:120) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....							-----
Yield .....							-----
Price .....							-----
<b>TOTAL .....</b>							<b>156.36</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....							4.32
Seed treatment .....							1.10
Fertilizer .....							20.99
Crop insurance .....							4.76
Herbicide .....							13.25
Insecticide .....							0.00
Repairs .....							5.98
Fuel, Oil and Lube...							3.04
Machine rent./cust.							.00
Hired labour .....							10.87
Operating interest ..							2.76
<b>TOTAL .....</b>							<b>66.12</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....							3.75
Capital Opp. Cost ..							2.53
Insurance, housing ..							.85
<b>TOTAL .....</b>							<b>7.13</b>
<b>TOTAL COST OF PRODUCTION .</b>							<b>73.25</b>
<b>CONTRIBUTION MARGIN .....</b>							<b>90.24</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>							<b>83.11</b>



**LOCATION:**

12 miles northeast  
of Strathmore

**COOPERATOR PROFILE**

ID# : 120-92-12

**FARM DESCRIPTION:**

The cooperator has a 4600 acre farm with economic and agronomic data being supplied from a 160 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as gently rolling. Organic matter content is 6.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be low.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a zero tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	wheat	barley	canola	wheat	wheat	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the need to reduce wind erosion. Conservation goals are to increase seedbed and subsoil moisture, and to increase crop yields and profits.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his open attitude towards change. Management ability and experience have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented challenge is the lack of funds with which to make the necessary changes.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to modify the rotary harrows to try and preserve more straw on the field.

Economic Summary for (Code#:120) Rotation #:1 Field #::2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....		Canola	Wheat	Wheat	Wheat	Barley	-----
Yield .....		31.00	32.00	48.00	37.00	86.00	-----
Price .....		7.03	4.35	3.16	2.05	1.85	-----
<b>TOTAL .....</b>		<b>217.93</b>	<b>139.20</b>	<b>151.68</b>	<b>75.85</b>	<b>159.10</b>	<b>148.75</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....		3.06	4.95	4.95	3.75	4.91	4.32
Seed treatment .....		2.01	1.00	1.00	1.50	0.00	1.10
Fertilizer .....		21.76	23.82	18.99	14.00	19.40	19.59
Crop insurance .....		5.35	5.35	5.35	3.00		4.76
Herbicide .....		13.97	17.46	5.67	19.45	16.87	14.68
Insecticide .....		0.00	0.00	0.00	0.00	0.00	0.00
Repairs .....		2.82	4.58	6.41	5.91	11.86	6.32
Fuel, Oil and Lube....		2.99	2.88	2.64	4.63	2.93	3.21
Machine rent./cust.		.00	.00	.00	.00	.00	.00
Hired labour .....		16.41	16.41	16.41	16.41	1.00	13.33
Operating interest ..		3.02	4.41	2.82	3.08	2.08	3.08
<b>TOTAL .....</b>		<b>71.40</b>	<b>80.85</b>	<b>64.23</b>	<b>71.73</b>	<b>59.04</b>	<b>69.45</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....		4.76	4.27	3.27	3.76	4.74	4.16
Capital Opp. Cost ...		2.97	2.51	2.30	2.52	2.99	2.66
Insurance, housing ..		1.01	.86	.78	.85	1.02	.90
<b>TOTAL .....</b>		<b>8.73</b>	<b>7.64</b>	<b>6.35</b>	<b>7.12</b>	<b>8.75</b>	<b>7.72</b>
<b>TOTAL COST OF PRODUCTION .</b>		<b>80.12</b>	<b>88.49</b>	<b>70.58</b>	<b>78.85</b>	<b>67.79</b>	<b>77.17</b>
<b>CONTRIBUTION MARGIN .....</b>		<b>146.53</b>	<b>58.35</b>	<b>87.45</b>	<b>4.12</b>	<b>100.06</b>	<b>79.30</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>		<b>137.81</b>	<b>50.71</b>	<b>81.10</b>	<b>-3.00</b>	<b>91.31</b>	<b>71.58</b>

**LOCATION:**

15 miles east of  
Crossfield

**COOPERATOR PROFILE**

ID# : 128-92-11

**FARM DESCRIPTION:**

The cooperator has a 1920 acre farm with economic and agronomic data being supplied from a 90 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 6.0%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	wheat	peas	wheat	fallow	barley	peas

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the need to reduce wind erosion. Conservation goals are to increase profits, leave the land in good condition, reduce perennial weeds, and to increase subsoil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his flexibility (need to respond to market requirements). Weed control and timeliness have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to shorten the rotation to include 25% fallow for weed control and reduce fertilizer requirements.

Economic Summary for (Code#:128) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Wheat	Peas	-----
Yield .....					55.00	40.00	-----
Price .....					2.08	5.00	-----
<b>TOTAL .....</b>					<b>114.40</b>	<b>200.00</b>	<b>157.20</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					5.95	13.50	9.73
Seed treatment .....					.75	1.50	1.13
Fertilizer .....					17.30	11.80	14.55
Crop insurance .....					6.00	3.00	4.50
Herbicide .....					16.49	15.97	16.23
Insecticide .....					0.00	0.00	0.00
Repairs .....					8.34	8.27	8.31
Fuel, Oil and Lube...					3.79	4.63	4.21
Machine rent./cust.					.50	.00	.25
Hired labour .....					8.14	4.72	6.43
Operating interest ..					2.63	1.92	2.28
<b>TOTAL .....</b>					<b>69.89</b>	<b>65.32</b>	<b>67.61</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					4.31	6.05	5.18
Capital Opp. Cost ...					4.85	3.04	3.95
Insurance, housing ..					1.63	1.04	1.33
<b>TOTAL .....</b>					<b>10.79</b>	<b>10.14</b>	<b>10.46</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>80.68</b>	<b>75.45</b>	<b>78.07</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>44.51</b>	<b>134.68</b>	<b>89.59</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>33.72</b>	<b>124.55</b>	<b>79.13</b>



**LOCATION:**

15 miles east of  
Crossfield

**COOPERATOR PROFILE**

ID# : 128-92-21

**FARM DESCRIPTION:**

The cooperator has a 1920 acre farm with economic and agronomic data being supplied from a 35 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of fine texture, on land classified as gently rolling. Organic matter content is 7.0%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995
barley	alfalfa	alfalfa	alfalfa	alfalfa	alfalfa

Forages and legumes are included in the rotation to control salinity and cut for hay.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the need to reduce soil salinity.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his use of legumes/forages which use up the excess moisture.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to extend the alfalfa rotation and to seed more acres.

Economic Summary for (Code#:128) Rotation #:2 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Alfalfa	Alfalfa	-----
Yield .....					.46	2.30	-----
Price .....					70.00	69.00	-----
<b>TOTAL .....</b>					<b>32.20</b>	<b>158.70</b>	<b>95.45</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					12.01	0.00	6.01
Seed treatment .....					1.00	0.00	.50
Fertilizer .....					14.50	13.00	13.75
Crop insurance .....					0.00		0.00
Herbicide .....					17.99	0.00	9.00
Insecticide .....					0.00	0.00	0.00
Repairs .....					6.19	1.27	3.73
Fuel, Oil and Lube...					2.63	4.11	3.37
Machine rent./cust.					.50	.00	.25
Hired labour .....					0.00	0.00	0.00
Operating interest ..					2.43	.66	1.55
<b>TOTAL .....</b>					<b>57.25</b>	<b>19.05</b>	<b>38.15</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					2.87	3.57	3.22
Capital Opp. Cost ...					3.48	2.65	3.07
Insurance, housing ..					1.16	.90	1.03
<b>TOTAL .....</b>					<b>7.51</b>	<b>7.13</b>	<b>7.32</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>64.77</b>	<b>26.17</b>	<b>45.47</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>-25.05</b>	<b>139.65</b>	<b>57.30</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>-32.57</b>	<b>132.53</b>	<b>49.98</b>

**LOCATION:**

7 miles south of  
Dalemead

**COOPERATOR PROFILE**

ID# : 153-92-11

**FARM DESCRIPTION:**

The cooperator has a 1126 acre farm with economic and agronomic data being supplied from a 40 acre field. This field is one of three fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 6.3%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
barley	barley	barley	canola	barley	barley	peas

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the need to increase crop yields. Conservation goals are to reduce wind erosion, leave the land in good condition, improve soil organic matter, and to increase subsoil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from timeliness. Moisture management and attitude have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the environmental inputs of chemicals.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to use an injection system for fertilizer that works with minimum disturbance.

Economic Summary for (Code#:153) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Barley	Barley	-----
Yield .....					28.00	80.00	-----
Price .....					1.60	2.00	-----
<b>TOTAL .....</b>					<b>44.80</b>	<b>160.00</b>	<b>102.40</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					4.25	4.03	4.14
Seed treatment .....					1.66	1.66	1.66
Fertilizer .....					15.40	19.46	17.43
Crop insurance .....					8.00	6.50	7.25
Herbicide .....					12.54	0.00	6.27
Insecticide .....					0.00	0.00	0.00
Repairs .....					5.46	7.44	6.45
Fuel, Oil and Lube...					3.97	2.35	3.16
Machine rent./cust.					5.25	5.25	5.25
Hired labour .....					0.00	0.00	0.00
Operating interest ..					2.25	1.42	1.84
<b>TOTAL .....</b>					<b>58.78</b>	<b>48.11</b>	<b>53.45</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					9.90	9.71	9.80
Capital Opp. Cost ..					4.08	4.33	4.21
Insurance, housing ..					1.42	1.51	1.46
<b>TOTAL .....</b>					<b>15.40</b>	<b>15.55</b>	<b>15.47</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>74.18</b>	<b>63.66</b>	<b>68.92</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>-13.98</b>	<b>111.89</b>	<b>48.95</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>-29.38</b>	<b>96.34</b>	<b>33.48</b>



## COOPERATOR PROFILE

ID# : 153-92-12

## FARM DESCRIPTION:

The cooperator has a 1126 acre farm with economic and agronomic data being supplied from a 40 acre field. This field is one of three fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 6.3%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
barley	barley	barley	canola	barley	barley	peas

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the need to increase crop yields. Conservation goals are to reduce wind erosion, leave the land in good condition, improve soil organic matter, and to increase subsoil moisture.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from timeliness. Moisture management and attitude have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the environmental inputs of chemicals.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to use an injection system for fertilizer that works with minimum disturbance.

Economic Summary for (Code#:153) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Peas	Barley	-----
Yield .....					33.00	70.00	-----
Price .....					4.50	2.25	-----
<b>TOTAL .....</b>					<b>148.50</b>	<b>157.50</b>	<b>153.00</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					25.20	3.96	14.58
Seed treatment .....					0.00	1.66	.83
Fertilizer .....					6.30	5.68	5.99
Crop insurance .....					8.00	6.50	7.25
Herbicide .....					26.97	2.19	14.58
Insecticide .....					0.00	0.00	0.00
Repairs .....					1.65	7.90	4.77
Fuel, Oil and Lube...					1.80	2.89	2.34
Machine rent./cust.					5.25	5.25	5.25
Hired labour .....					0.00	0.00	0.00
Operating interest ..					3.25	.96	2.10
<b>TOTAL .....</b>					<b>78.41</b>	<b>36.99</b>	<b>57.70</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					4.90	10.00	7.45
Capital Opp. Cost ...					2.14	4.71	3.43
Insurance, housing ..					.74	1.63	1.18
<b>TOTAL .....</b>					<b>7.77</b>	<b>16.35</b>	<b>12.06</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>86.18</b>	<b>53.34</b>	<b>69.76</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>70.09</b>	<b>120.51</b>	<b>95.30</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>62.32</b>	<b>104.16</b>	<b>83.24</b>

**LOCATION:**

7 miles south of  
Dalemead

**COOPERATOR PROFILE**

ID# : 153-92-21

**FARM DESCRIPTION:**

The cooperator has a 1126 acre farm with economic and agronomic data being supplied from a 80 acre field. This field is one of three fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 6.3%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995
canola	barley	fallow	canola	barley	barley

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the need to increase crop yields. Conservation goals are to reduce wind erosion, leave the land in good condition, improve soil organic matter, and to increase subsoil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from timeliness. Moisture management and attitude have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the environmental inputs of chemicals.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to use an injection system for fertilizer that works with minimum disturbance.

Economic Summary for (Code#:153) Rotation #:2 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Barley	Fallow	-----
Yield .....					34.00	0.00	-----
Price .....					1.60	0.00	-----
<b>TOTAL .....</b>					<b>54.40</b>	<b>0.00</b>	<b>27.20</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					4.25	0.00	2.13
Seed treatment .....					1.66	0.00	.83
Fertilizer .....					15.40	0.00	7.70
Crop insurance .....					8.00		8.00
Herbicide .....					12.54	9.91	11.22
Insecticide .....					0.00	0.00	0.00
Repairs .....					5.46	1.17	3.31
Fuel, Oil and Lube...					3.97	.97	2.47
Machine rent./cust.					5.25	3.50	4.38
Hired labour .....					0.00	0.00	0.00
Operating interest ..					2.29	.40	1.35
<b>TOTAL .....</b>					<b>58.82</b>	<b>15.95</b>	<b>37.39</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					9.90	1.24	5.57
Capital Opp. Cost ...					4.08	1.60	2.84
Insurance, housing ..					1.42	.54	.98
<b>TOTAL .....</b>					<b>15.40</b>	<b>3.38</b>	<b>9.39</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>74.22</b>	<b>19.33</b>	<b>46.78</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>-4.42</b>	<b>-15.95</b>	<b>-10.19</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>-19.82</b>	<b>-19.33</b>	<b>-19.58</b>



**LOCATION:**

10 miles southeast  
of Blackie

**COOPERATOR PROFILE**

ID# : 154-92-11

**FARM DESCRIPTION:**

The cooperator has a 3440 acre farm with economic and agronomic data being supplied from a 85 acre field. This field is one of four fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.5%.

The cooperator feels that there is a potential for salinity problems on this field. Water erosion potential seems to be moderate while wind erosion possibilities are felt to be high.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	wheat	fallow	canola	wheat	wheat	fallow

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve seedbed moisture. Other conservation goals are to reduce wind erosion, leave the land in good condition, reduce fertilizer inputs, and to increase crop yields.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from experience. Reduced cultivation, chemicals, and machinery have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is peer pressure.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to incorporate legumes into the rotation, use longer rotations, and continue to modify/eliminate fallow.

Economic Summary for (Code#:154) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....			Canola	Canola	Wheat	Fallow	-----
Yield .....			6.00	24.00	31.00	0.00	-----
Price .....			6.89	6.80	2.16	0.00	-----
<b>TOTAL .....</b>			<b>41.34</b>	<b>163.20</b>	<b>66.96</b>	<b>0.00</b>	<b>67.88</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			6.00	2.22	.38	0.00	2.15
Seed treatment .....			0.00	2.88	1.28	0.00	1.04
Fertilizer .....			29.00	6.57	10.40	0.00	11.49
Crop insurance .....			7.00	8.00	7.00	0.00	7.33
Herbicide .....			7.92	12.99	5.39	3.15	7.36
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			4.44	3.60	3.23	.86	3.03
Fuel, Oil and Lube...			1.26	4.21	2.70	2.31	2.62
Machine rent./cust.			.00	.00	.00	.00	.00
Hired labour .....			0.00	0.00	6.67	3.47	2.53
Operating interest ..			3.35	2.27	1.14	.17	1.73
<b>TOTAL .....</b>			<b>58.97</b>	<b>42.74</b>	<b>38.19</b>	<b>9.96</b>	<b>37.47</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			7.36	12.00	5.73	.57	6.41
Capital Opp. Cost ...			2.61	4.03	2.20	.54	2.35
Insurance, housing ...			.91	1.41	.77	.19	.82
<b>TOTAL .....</b>			<b>10.88</b>	<b>17.44</b>	<b>8.70</b>	<b>1.30</b>	<b>9.58</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>69.85</b>	<b>60.18</b>	<b>46.89</b>	<b>11.26</b>	<b>47.05</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-17.63</b>	<b>120.46</b>	<b>28.77</b>	<b>-9.96</b>	<b>30.41</b>
<b>RETURN TO LAND, LAB. &amp; MGNT</b>			<b>-28.51</b>	<b>103.02</b>	<b>20.07</b>	<b>-11.26</b>	<b>20.83</b>

**LOCATION:**

10 miles southeast  
of Blackie

**COOPERATOR PROFILE**

ID# : 154-92-12

**FARM DESCRIPTION:**

The cooperator has a 3440 acre farm with economic and agronomic data being supplied from a 75 acre field. This field is one of four fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.5%.

The cooperator feels that there is a potential for salinity problems on this field. Water erosion potential seems to be moderate while wind erosion possibilities are felt to be high.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	wheat	fallow	canola	wheat	wheat	fallow

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve seedbed moisture. Other conservation goals are to reduce wind erosion, leave the land in good condition, reduce fertilizer inputs, and to increase crop yields.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from experience. Reduced cultivation, chemicals, and machinery have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is peer pressure.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to incorporate legumes into the rotation, use longer rotations, and continue to modify/eliminate fallow.

Economic Summary for (Code#:154) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....			Wheat	Fallow	Wheat	Fallow	-----
Yield .....			20.00	0.00	40.00	0.00	-----
Price .....			4.55	0.00	2.16	0.00	-----
<b>TOTAL .....</b>			<b>91.00</b>	<b>0.00</b>	<b>86.40</b>	<b>0.00</b>	<b>44.35</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			6.00	0.00	.38	0.00	1.60
Seed treatment .....			0.00	0.00	1.28	0.00	.32
Fertilizer .....			17.50	0.00	8.40	0.00	6.48
Crop insurance .....			7.00	0.00	7.00		4.67
Herbicide .....			13.20	10.00	5.16	3.15	7.88
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			3.26	.49	3.23	.83	1.95
Fuel, Oil and Lube...			1.85	1.10	2.70	2.31	1.99
Machine rent./cust.			.00	.00	.00	.00	.00
Hired labour .....			0.00	0.00	5.88	3.47	2.34
Operating interest ..			2.86	.73	1.04	.17	1.20
<b>TOTAL .....</b>			<b>51.67</b>	<b>12.33</b>	<b>35.07</b>	<b>9.93</b>	<b>27.25</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			7.12	.55	5.71	.94	3.58
Capital Opp. Cost ..			3.19	.29	2.20	.42	1.53
Insurance, housing ..			1.11	.10	.77	.15	.53
<b>TOTAL .....</b>			<b>11.42</b>	<b>.94</b>	<b>8.69</b>	<b>1.51</b>	<b>5.64</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>63.09</b>	<b>13.27</b>	<b>43.75</b>	<b>11.44</b>	<b>32.89</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>39.33</b>	<b>-12.33</b>	<b>51.33</b>	<b>-9.93</b>	<b>17.10</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>27.91</b>	<b>-13.27</b>	<b>42.65</b>	<b>-11.44</b>	<b>11.46</b>



**LOCATION:**

10 miles southeast  
of Blackie

**COOPERATOR PROFILE**

ID# : 154-92-13

**FARM DESCRIPTION:**

The cooperator has a 3440 acre farm with economic and agronomic data being supplied from a 70 acre field. This field is one of four fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.5%.

The cooperator feels that there is a potential for salinity problems on this field. Water erosion potential seems to be moderate while wind erosion possibilities are also felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
fallow	canola	wheat	wheat	fallow	canola	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve seedbed moisture. Other conservation goals are to reduce wind erosion, leave the land in good condition, reduce fertilizer inputs, and to increase crop yields.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from experience. Reduced cultivation, chemicals, and machinery have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is peer pressure.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to incorporate legumes into the rotation, use longer rotations, and continue to modify/eliminate fallow.

Economic Summary for (Code#:154) Rotation #:1 Field #:3

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Canola	Wheat	-----
Yield .....				0.00	14.00	32.00	-----
Price .....				0.00	5.50	2.15	-----
<b>TOTAL .....</b>			<b>0.00</b>	<b>0.00</b>	<b>77.00</b>	<b>68.80</b>	<b>36.45</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			0.00	0.00	6.00	2.40	2.10
Seed treatment .....			0.00	0.00	0.00	1.28	.32
Fertilizer .....			0.00	0.00	9.00	13.20	5.55
Crop insurance .....			0.00	0.00	7.00		2.33
Herbicide .....			0.00	4.86	0.00	5.73	2.65
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			.00	.17	3.74	4.86	2.19
Fuel, Oil and Lube...			.00	.15	3.94	4.01	2.02
Machine rent./cust.			.00	.00	.00	.00	.00
Hired labour .....			0.00	0.00	6.25	14.00	5.06
Operating interest ..			.00	.33	1.14	1.01	.62
<b>TOTAL .....</b>			<b>.00</b>	<b>5.52</b>	<b>37.07</b>	<b>46.49</b>	<b>22.27</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			.00	.49	5.66	8.95	3.77
Capital Opp. Cost ...			.00	.14	3.12	3.63	1.72
Insurance, housing ..			.00	.05	1.09	1.27	.60
<b>TOTAL .....</b>			<b>.00</b>	<b>.68</b>	<b>9.86</b>	<b>13.86</b>	<b>6.10</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>.00</b>	<b>6.20</b>	<b>46.93</b>	<b>60.34</b>	<b>28.37</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-.00</b>	<b>-5.52</b>	<b>39.93</b>	<b>22.31</b>	<b>14.18</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>-.00</b>	<b>-6.20</b>	<b>30.07</b>	<b>8.46</b>	<b>8.08</b>

**LOCATION:**

10 miles southeast  
of Blackie

**COOPERATOR PROFILE**

ID# : 154-92-14

**FARM DESCRIPTION:**

The cooperator has a 3440 acre farm with economic and agronomic data being supplied from a 85 acre field. This field is one of four fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.5%.

The cooperator feels that there is a potential for salinity problems on this field. Water erosion potential seems to be moderate while wind erosion possibilities are felt to be high.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	wheat	fallow	canola	wheat	wheat	fallow

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve seedbed moisture. Other conservation goals are to reduce wind erosion, leave the land in good condition, reduce fertilizer inputs, and to increase crop yields.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from experience. Reduced cultivation, chemicals, and machinery have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is peer pressure.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to incorporate legumes into the rotation, use longer rotations, and continue to modify/eliminate fallow.

Economic Summary for (Code#:154) Rotation #:1 Field #:4

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Canola	Wheat	Fallow	-----
Yield .....				20.00	30.00	0.00	-----
Price .....				6.80	2.16	0.00	-----
<b>TOTAL .....</b>				<b>136.00</b>	<b>64.80</b>	<b>0.00</b>	<b>66.93</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				4.44	.32	0.00	1.58
Seed treatment .....				5.76	1.28	0.00	2.35
Fertilizer .....				6.57	10.40	0.00	5.66
Crop insurance .....				0.00	7.00		3.50
Herbicide .....				12.99	5.26	3.15	7.14
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				3.93	3.23	.83	2.66
Fuel, Oil and Lube...				2.74	2.70	2.31	2.58
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				0.00	5.88	3.06	2.98
Operating interest ..				2.22	1.10	.17	1.16
<b>TOTAL .....</b>				<b>38.65</b>	<b>37.16</b>	<b>9.52</b>	<b>28.44</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				14.15	5.72	.94	6.94
Capital Opp. Cost ...				4.37	2.20	.42	2.33
Insurance, housing ..				1.53	.77	.15	.82
<b>TOTAL .....</b>				<b>20.05</b>	<b>8.69</b>	<b>1.51</b>	<b>10.08</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>58.70</b>	<b>45.85</b>	<b>11.03</b>	<b>38.53</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>97.35</b>	<b>27.64</b>	<b>-9.52</b>	<b>38.49</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>77.30</b>	<b>18.95</b>	<b>-11.03</b>	<b>28.41</b>



## COOPERATOR PROFILE

ID# : 155-92-11

## FARM DESCRIPTION:

The cooperator has a 2350 acre farm with economic and agronomic data being supplied from a 150 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of fine texture, on land classified as gently rolling. Organic matter content is 7.5%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be low.

## CONSERVATION SYSTEM DESCRIPTION:

This is a zero tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
wheat	wheat	wheat	wheat

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the need to reduce wind erosion. Other conservation goals are to reduce water erosion, control weeds, increase crop yields, and to improve the overall quality of the land.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from proper management of moisture. Reduced cultivation and financing and marketing have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is low commodity prices.

## FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has no plans for any future changes.

Economic Summary for (Code#:155) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Wheat	Wheat	-----
Yield .....					38.00	36.00	-----
Price .....					2.03	2.00	-----
<b>TOTAL .....</b>					<b>77.14</b>	<b>72.00</b>	<b>74.57</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					6.40	8.00	7.20
Seed treatment .....					0.00	1.00	.50
Fertilizer .....					15.40	13.91	14.65
Crop insurance .....					8.94	2.03	5.49
Herbicide .....					3.80	3.50	3.65
Insecticide .....					0.00	0.00	0.00
Repairs .....					4.70	9.04	6.87
Fuel, Oil and Lube...					4.45	1.47	2.96
Machine rent./cust.					.00	.00	.00
Hired labour .....					15.25	0.00	7.63
Operating interest ..					1.73	1.19	1.46
<b>TOTAL .....</b>					<b>60.67</b>	<b>40.14</b>	<b>50.40</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					2.55	3.77	3.16
Capital Opp. Cost ...					3.19	2.37	2.78
Insurance, housing ..					1.10	.82	.96
<b>TOTAL .....</b>					<b>6.84</b>	<b>6.95</b>	<b>6.90</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>67.52</b>	<b>47.09</b>	<b>57.30</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>16.47</b>	<b>31.86</b>	<b>24.17</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>9.62</b>	<b>24.91</b>	<b>17.27</b>

**LOCATION:**

12 miles southeast  
of Beiseker

**COOPERATOR PROFILE**

ID# : 156-92-11

**FARM DESCRIPTION:**

The cooperator has a 400 acre farm with economic and agronomic data being supplied from a 33 acre field. This field is one of three fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.5%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995
canola	wheat	fallow	canola	barley	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to leave the land in good condition, control weeds, improve seedbed moisture, and to increase subsoil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from a positive attitude. Management, livestock and timeliness have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the concern for environmental inputs of chemicals.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to reduce tillage speed and increase the use of chemical fallow.

Economic Summary for (Code#:156) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Fallow	Fallow	-----
Yield .....					0.00		-----
Price .....					0.00		-----
<b>TOTAL .....</b>					<b>0.00</b>	<b>0.00</b>	<b>0.00</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					0.00	0.00	0.00
Seed treatment .....					0.00	0.00	0.00
Fertilizer .....					0.00	0.00	0.00
Crop insurance .....					0.00		0.00
Herbicide .....					7.39	1.20	4.30
Insecticide .....					0.00	0.00	0.00
Repairs .....					1.21	.75	.98
Fuel, Oil and Lube...					3.24	1.24	2.24
Machine rent./cust.					.00	1.00	.50
Hired labour .....					0.00	0.00	0.00
Operating interest ..					.36	.12	.24
<b>TOTAL .....</b>					<b>12.21</b>	<b>4.32</b>	<b>8.26</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					3.47	1.45	2.46
Capital Opp. Cost ...					2.46	1.68	2.07
Insurance, housing ..					.81	.55	.68
<b>TOTAL .....</b>					<b>6.74</b>	<b>3.69</b>	<b>5.21</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>18.95</b>	<b>8.00</b>	<b>13.48</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>-12.21</b>	<b>-4.32</b>	<b>-8.26</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>-18.95</b>	<b>-8.00</b>	<b>-13.48</b>



**LOCATION:**

12 miles southeast  
of Beiseker

**COOPERATOR PROFILE**

ID# : 156-92-21

**FARM DESCRIPTION:**

The cooperator has a 400 acre farm with economic and agronomic data being supplied from a 40 acre field. This field is one of three fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.5%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
barley	fallow	canola	barley	barley	fallow	canola

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to leave the land in good condition, control weeds, improve seedbed moisture, and to increase subsoil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from a positive attitude. Management, livestock and timeliness have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the concern for environmental inputs of chemicals.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to reduce tillage speed and increase the use of chemical fallow.

Economic Summary for (Code#:156) Rotation #:2 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Canola	-----
Yield .....						33.00	-----
Price .....						8.50	-----
<b>TOTAL .....</b>						<b>280.50</b>	<b>280.50</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						4.08	4.08
Seed treatment .....						0.00	0.00
Fertilizer .....						4.00	4.00
Crop insurance .....						5.63	5.63
Herbicide .....						0.00	0.00
Insecticide .....						0.00	0.00
Repairs .....						1.89	1.89
Fuel, Oil and Lube...						1.74	1.74
Machine rent./cust.						.00	.00
Hired labour .....						0.00	0.00
Operating interest ..						.47	.47
<b>TOTAL .....</b>						<b>17.81</b>	<b>17.81</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						9.88	9.88
Capital Opp. Cost ...						5.19	5.19
Insurance, housing ..						1.81	1.81
<b>TOTAL .....</b>						<b>16.88</b>	<b>16.88</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>34.69</b>	<b>34.69</b>
<b>CONTRIBUTION MARGIN .....</b>							
						<b>262.69</b>	<b>262.69</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>							
						<b>245.81</b>	<b>245.81</b>

**LOCATION:**

12 miles southeast  
of Beiseker

**COOPERATOR PROFILE**

ID# : 156-92-22

**FARM DESCRIPTION:**

The cooperator has a 400 acre farm with economic and agronomic data being supplied from a 34 acre field. This field is one of three fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.5%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
fallow	canola	barley	fallow	canola	barley	barley

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to leave the land in good condition, control weeds, improve seedbed moisture, and to increase subsoil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from a positive attitude. Management, livestock and timeliness have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the concern for environmental inputs of chemicals.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to reduce tillage speed and increase the use of chemical fallow.

Economic Summary for (Code#:156) Rotation #:2 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Barley	-----
Yield .....						75.00	-----
Price .....						3.25	-----
<b>TOTAL .....</b>						<b>243.75</b>	<b>243.75</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						225.00	225.00
Seed treatment .....						0.00	0.00
Fertilizer .....						13.50	13.50
Crop insurance .....						3.54	3.54
Herbicide .....						3.50	3.50
Insecticide .....						0.00	0.00
Repairs .....						3.62	3.62
Fuel, Oil and Lube...						4.03	4.03
Machine rent./cust.						.00	.00
Hired labour .....						0.00	0.00
Operating interest ..						8.65	8.65
<b>TOTAL .....</b>						<b>261.84</b>	<b>261.84</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						13.15	13.15
Capital Opp. Cost ..						9.16	9.16
Insurance, housing ..						3.13	3.13
<b>TOTAL .....</b>						<b>25.45</b>	<b>25.45</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>287.30</b>	<b>287.30</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>-18.09</b>	<b>-18.09</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>-43.55</b>	<b>-43.55</b>



## COOPERATOR PROFILE

ID# : 157-92-11

## FARM DESCRIPTION:

The cooperator has a 2200 acre farm with economic and agronomic data being supplied from a 134 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of fine texture, on land classified as gently rolling. Organic matter content is 7.0%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are felt to be moderate and high respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994
wheat	fallow	canola	barley	fallow

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the need to reduce wind erosion. Other conservation goals are to improve the seedbed and subsoil moisture levels, and to improve the soils organic matter and overall condition.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from the move to reduced cultivation. Proper moisture and weed control management have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the high cost of inputs such as chemicals and fertilizers.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to increase spraying to control weeds on summerfallow.

Economic Summary for (Code#:157) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....			Fallow	Wheat	Fallow	Canola	-----
Yield .....			0.00	45.00	0.00	33.00	-----
Price .....			0.00	3.15	0.00	1.50	-----
<b>TOTAL .....</b>			<b>0.00</b>	<b>141.75</b>	<b>0.00</b>	<b>49.50</b>	<b>47.81</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine .....			0.00	6.00	0.00	5.20	2.80
Seed treatment .....			0.00	0.00	0.00	0.00	0.00
Fertilizer .....			0.00	12.80	0.00	3.20	4.00
Crop insurance .....			0.00	7.00	0.00	6.92	3.48
Herbicide .....			15.51	15.79	0.00	14.01	11.33
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			1.27	4.82	1.20	6.16	3.36
Fuel, Oil and Lube...			1.92	6.05	3.76	3.30	3.76
Machine rent./cust.			.00	.00	1.00	6.00	1.75
Hired labour .....			0.00	0.00	0.00	0.00	0.00
Operating interest ..			.37	4.80	.20	1.28	1.66
<b>TOTAL .....</b>			<b>19.08</b>	<b>57.25</b>	<b>6.16</b>	<b>46.07</b>	<b>32.14</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			.96	11.26	2.12	12.62	6.74
Capital Opp. Cost ...			.80	4.46	1.40	5.22	2.97
Insurance, housing ..			.26	1.52	.46	1.80	1.01
<b>TOTAL .....</b>			<b>2.02</b>	<b>17.23</b>	<b>3.98</b>	<b>19.64</b>	<b>10.72</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>21.10</b>	<b>74.49</b>	<b>10.14</b>	<b>65.72</b>	<b>42.86</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-19.08</b>	<b>84.50</b>	<b>-6.16</b>	<b>3.43</b>	<b>15.67</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>-21.10</b>	<b>67.26</b>	<b>-10.14</b>	<b>-16.22</b>	<b>4.95</b>

## COOPERATOR PROFILE

ID# : 109-92-11

## FARM DESCRIPTION:

The cooperator has a 800 acre farm with economic and agronomic data being supplied from a 60 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 9.1%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be low.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	barley	peas	wheat	barley	barley	peas

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve the condition of the land. Other conservation goals are to improve the seedbed moisture, to improve the soils organic matter, reduce wind erosion, and to increase profits.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from experience and the accumulation of background information about conservation farming. Reduced cultivation and the use of peas have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the lack of technical information available.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to purchase Phoenix harrows for straw management, and to use more Roundup for better weed control.

Economic Summary for (Code#:109) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Wheat	Barley	Peas	-----
Yield .....				55.00	75.00	42.00	-----
Price .....				3.11	1.60	4.85	-----
<b>TOTAL .....</b>				<b>171.05</b>	<b>120.00</b>	<b>203.70</b>	<b>164.92</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				9.00	1.68	29.70	13.46
Seed treatment .....				1.44	1.34	0.00	.93
Fertilizer .....				17.88	5.53	28.05	17.15
Crop insurance .....				13.80	9.40	2.00	8.40
Herbicide .....				4.50	6.16	35.72	15.46
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				7.93	4.35	10.93	7.74
Fuel, Oil and Lube...				8.21	3.43	6.23	5.96
Machine rent./cust.				.00	.00	3.50	1.17
Hired labour .....				0.00	.68	2.00	.89
Operating interest ..				4.18	1.32	3.65	3.05
<b>TOTAL .....</b>				<b>66.95</b>	<b>33.89</b>	<b>121.78</b>	<b>74.21</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				13.01	4.62	12.92	10.18
Capital Opp. Cost ...				13.01	5.70	14.47	11.06
Insurance, housing ..				4.46	1.95	4.97	3.79
<b>TOTAL .....</b>				<b>30.48</b>	<b>12.27</b>	<b>32.36</b>	<b>25.04</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>97.43</b>	<b>46.16</b>	<b>154.14</b>	<b>99.24</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>104.10</b>	<b>86.11</b>	<b>81.92</b>	<b>90.71</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>73.62</b>	<b>73.84</b>	<b>49.56</b>	<b>65.67</b>



**LOCATION:**

2 miles west of  
Daysland

**COOPERATOR PROFILE**

ID# : 113-92-11

**FARM DESCRIPTION:**

The cooperator has a 1280 acre farm with economic and agronomic data being supplied from a 100 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 7.8%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be low.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a zero tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
canola	wheat	wheat	peas	wheat	canola	wheat

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to improve the seedbed moisture, increase crop yields, improve time management, and to improve the overall condition of the land.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his attitude towards conservation. More intensive management and gained experience have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the persistence of weed problems on a year to year basis.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to broadcast seed cereal crops to achieve uniform seed depth and to return to the use of ammonia gas as a cheaper alternative to dry fertilizers.

Economic Summary for (Code#:113) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Canola	Wheat	Wheat	-----
Yield .....				30.00	50.00	38.00	-----
Price .....				6.60	2.28	2.00	-----
<b>TOTAL .....</b>				<b>198.00</b>	<b>114.00</b>	<b>76.00</b>	<b>129.33</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				2.22	5.25	5.63	4.37
Seed treatment .....				2.88	0.00	0.00	.96
Fertilizer .....				21.32	10.16	16.59	16.02
Crop insurance .....				4.50	2.20		3.35
Herbicide .....				1.93	18.94	24.88	15.25
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				4.92	4.72	5.77	5.14
Fuel, Oil and Lube...				5.56	3.32	2.95	3.94
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				0.00	1.00	.80	.60
Operating interest ..				2.35	1.85	2.11	2.10
<b>TOTAL .....</b>				<b>45.68</b>	<b>47.45</b>	<b>58.72</b>	<b>50.62</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				10.08	4.90	5.97	6.99
Capital Opp. Cost ...				6.27	4.44	4.41	5.04
Insurance, housing ..				2.09	1.50	1.49	1.69
<b>TOTAL .....</b>				<b>18.44</b>	<b>10.84</b>	<b>11.87</b>	<b>13.72</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>64.12</b>	<b>58.29</b>	<b>70.59</b>	<b>64.33</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>152.32</b>	<b>66.55</b>	<b>17.28</b>	<b>78.72</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>133.88</b>	<b>55.71</b>	<b>5.41</b>	<b>65.00</b>

**LOCATION:**

10 miles southeast  
of Lacombe

**COOPERATOR PROFILE**

ID# : 117-92-11

**FARM DESCRIPTION:**

The cooperator has a 474 acre farm with economic and agronomic data being supplied from a 20 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 6.4%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be low.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
oats	hay	hay	hay	hay	oats	barley

Forages and legumes are included in the rotation and utilized by being cut for hay and grazed.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve the overall condition of the land. Other conservation goals are to reduce perennial weed problems, improve the soils organic matter, and to reduce wind and water erosion.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from experience. The availability of livestock and management have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the variable climate in the area.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator has not made any plans for changes to his operation in the future.

Economic Summary for (Code#:117) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Oats	Alfalfa	Hay	-----
Yield .....				1.65	3.43	2.17	-----
Price .....				46.00	35.41	50.00	-----
<b>TOTAL .....</b>				<b>75.90</b>	<b>121.28</b>	<b>108.50</b>	<b>101.89</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				2.00	0.00	0.00	.67
Seed treatment .....				0.00	0.00	0.00	0.00
Fertilizer .....				0.00	11.50	18.90	10.13
Crop insurance .....				0.00	0.00		0.00
Herbicide .....				0.00	0.00	0.00	0.00
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				2.41	4.73	3.55	3.57
Fuel, Oil and Lube...				4.11	6.80	3.82	4.91
Machine rent./cust.				.00	12.69	3.50	5.40
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				.41	1.41	.92	.91
<b>TOTAL .....</b>				<b>8.92</b>	<b>37.13</b>	<b>30.69</b>	<b>25.58</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				12.24	14.65	8.00	11.63
Capital Opp. Cost ...				4.17	6.45	6.26	5.63
Insurance, housing ..				1.44	2.23	2.11	1.92
<b>TOTAL .....</b>				<b>17.84</b>	<b>23.33</b>	<b>16.36</b>	<b>19.18</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>26.77</b>	<b>60.46</b>	<b>47.06</b>	<b>44.76</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>66.98</b>	<b>84.15</b>	<b>77.81</b>	<b>76.31</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>49.13</b>	<b>60.82</b>	<b>61.44</b>	<b>57.13</b>



## COOPERATOR PROFILE

ID# : 125-92-11

### FARM DESCRIPTION:

The cooperator has a 3200 acre farm with economic and agronomic data being supplied from a 80 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as gently rolling. Organic matter content is 4.7%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be low.

### CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	wheat	canola	wheat	wheat	barley	canola

Forages and legumes are not included in the rotation.

### GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve the overall condition of the land. Other conservation goals are to reduce perennial weed problems, improve seedbed moisture, increase profits, and to reduce water erosion.

### MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from proper weed control. Reduced cultivation and management of straw have also contributed.

### CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

### FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to find more efficient ways of using the Brandt rotary harrows in high trash areas.

**Economic Summary for (Code#:125) Rotation #:1 Field #:1**

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Wheat	Wheat	Canola	-----
Yield .....				46.00	54.10	31.00	-----
Price .....				3.13	2.25	6.50	-----
<b>TOTAL .....</b>				<b>143.98</b>	<b>121.73</b>	<b>201.50</b>	<b>155.74</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				6.00	3.75	3.83	4.53
Seed treatment .....				0.00	2.25	0.00	.75
Fertilizer .....				21.41	22.20	20.50	21.37
Crop insurance .....				6.86	5.54	5.05	5.82
Herbicide .....				16.66	29.39	18.00	21.35
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				2.53	3.58	3.26	3.12
Fuel, Oil and Lube...				5.33	3.79	2.12	3.75
Machine rent./cust.				.00	1.85	.00	.62
Hired labour .....				16.50	16.50	5.00	12.67
Operating interest ..				5.00	5.15	1.64	3.93
<b>TOTAL .....</b>				<b>80.28</b>	<b>94.00</b>	<b>59.40</b>	<b>77.90</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				9.91	8.63	4.77	7.77
Capital Opp. Cost ...				5.43	5.18	3.33	4.65
Insurance, housing ..				1.84	1.76	1.12	1.57
<b>TOTAL .....</b>				<b>17.18</b>	<b>15.56</b>	<b>9.23</b>	<b>13.99</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>97.47</b>	<b>109.57</b>	<b>68.63</b>	<b>91.89</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>63.70</b>	<b>27.72</b>	<b>142.10</b>	<b>77.84</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>46.51</b>	<b>12.16</b>	<b>132.87</b>	<b>63.85</b>

## COOPERATOR PROFILE

ID# : 147-92-11

## FARM DESCRIPTION:

The cooperator has a 3200 acre farm with economic and agronomic data being supplied from a 130 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as hilly. Organic matter content is 5.1%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

## CONSERVATION SYSTEM DESCRIPTION:

This is a single tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	fallow	rye	canola	wheat	fallow	barley

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve seedbed moisture. Other conservation goals are to reduce wind erosion, increase profits, reduce water erosion, and to reduce perennial weeds.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from proper moisture management. Weed control and rotation choice have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to put 1/4 of the rotation into fall seed crops to get the maximum advantage of early spring moisture, to plant forages for seed production, and to seed fall crops into standing barley and canola stubble.

Economic Summary for (Code#:147) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Wheat	Fallow	Fall Rye	-----
Yield .....				35.00	0.00	70.00	-----
Price .....				3.15	0.00	2.25	-----
<b>TOTAL .....</b>				<b>110.25</b>	<b>0.00</b>	<b>157.50</b>	<b>89.25</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				6.00	0.00	2.52	2.84
Seed treatment .....				1.50	0.00	0.00	.50
Fertilizer .....				10.88	0.00	8.47	6.45
Crop insurance .....				3.50	0.00		1.75
Herbicide .....				11.35	28.08	1.63	13.69
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				7.08	.55	11.36	6.33
Fuel, Oil and Lube...				2.99	.44	4.45	2.62
Machine rent./cust.				.00	.00	2.75	.92
Hired labour .....				0.00	0.00	3.60	1.20
Operating interest ..				2.46	2.13	1.39	1.99
<b>TOTAL .....</b>				<b>45.76</b>	<b>31.19</b>	<b>36.17</b>	<b>37.71</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				.00	.00	.00	.00
Capital Opp. Cost ...				3.29	.45	7.59	3.78
Insurance, housing ..				1.12	.15	2.61	1.30
<b>TOTAL .....</b>				<b>4.41</b>	<b>.60</b>	<b>10.21</b>	<b>5.07</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>50.17</b>	<b>31.79</b>	<b>46.38</b>	<b>42.78</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>64.49</b>	<b>-31.19</b>	<b>121.33</b>	<b>51.54</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>60.08</b>	<b>-31.79</b>	<b>111.12</b>	<b>46.47</b>



## COOPERATOR PROFILE

ID# : 102-92-11

## FARM DESCRIPTION:

The cooperator has a 1280 acre farm with economic and agronomic data being supplied from a 140 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.7%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995
canola	barley	peas	barley	canola	wheat&peas

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to increase crop yields, improve seedbed moisture, reduce fertilizer inputs, and to lessen wind erosion.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from his positive attitude. Management and knowledge of spray chemicals have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is low commodity prices.

## FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has not made any plans for changes to his operation in the future.

Economic Summary for (Code#:102) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Canola	Barley	Peas	-----
Yield .....				30.00	30.00	35.00	-----
Price .....				5.50	1.16	5.70	-----
<b>TOTAL .....</b>				<b>165.00</b>	<b>34.80</b>	<b>199.50</b>	<b>133.10</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				9.10	8.40	20.88	12.79
Seed treatment .....				0.00	2.52	3.00	1.84
Fertilizer .....				23.52	22.16	12.59	19.42
Crop insurance .....				0.00	0.00		0.00
Herbicide .....				32.82	5.00	9.00	15.61
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				5.16	7.17	6.65	6.33
Fuel, Oil and Lube...				.99	2.09	4.25	2.44
Machine rent./cust.				.00	.00	2.50	.83
Hired labour .....				1.10	7.20	1.94	3.41
Operating interest ..				5.55	1.92	1.76	3.08
<b>TOTAL .....</b>				<b>78.25</b>	<b>56.46</b>	<b>62.57</b>	<b>65.76</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				5.86	5.76	4.99	5.54
Capital Opp. Cost ..				6.36	7.66	5.59	6.54
Insurance, housing ..				2.16	2.61	1.92	2.23
<b>TOTAL .....</b>				<b>14.39</b>	<b>16.03</b>	<b>12.49</b>	<b>14.30</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>92.63</b>	<b>72.48</b>	<b>75.07</b>	<b>80.06</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>86.75</b>	<b>-21.66</b>	<b>136.93</b>	<b>67.34</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>72.37</b>	<b>-37.68</b>	<b>124.43</b>	<b>53.04</b>

## COOPERATOR PROFILE

ID# : 105-92-11

## FARM DESCRIPTION:

The cooperator has a 1760 acre farm with economic and agronomic data being supplied from a 40 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 8.7%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to be low and moderate respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
peas	wheat	canola	wheat	peas	wheat	canola

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to increase subsoil moisture. Other conservation goals are to reduce wind erosion and to increase crop yields and profits.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from his management capabilities. Moisture management and management of straw and chaff have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the high cost of inputs such as chemicals and fertilizer.

## FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has not made any plans for changes to his operation in the future.

Economic Summary for (Code#:105) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Wheat	Canola	-----
Yield .....					65.00	24.00	-----
Price .....					2.01	6.08	-----
<b>TOTAL .....</b>					<b>130.65</b>	<b>145.92</b>	<b>138.29</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine .....					6.30	5.95	6.13
Seed treatment .....					0.00	0.00	0.00
Fertilizer .....					10.40	16.65	13.53
Crop insurance .....					3.75	11.50	7.63
Herbicide .....					14.24	10.63	12.44
Insecticide .....					0.00	0.00	0.00
Repairs .....					6.57	6.14	6.35
Fuel, Oil and Lube...					4.83	3.01	3.92
Machine rent./cust.					1.50	.50	1.00
Hired labour .....					0.00	.70	.35
Operating interest ..					1.99	1.57	1.78
<b>TOTAL .....</b>					<b>49.58</b>	<b>56.65</b>	<b>53.11</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					10.23	6.26	8.24
Capital Opp. Cost ...					3.58	2.56	3.07
Insurance, housing ..					1.23	.88	1.06
<b>TOTAL .....</b>					<b>15.04</b>	<b>9.70</b>	<b>12.37</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>64.62</b>	<b>66.35</b>	<b>65.49</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>81.07</b>	<b>89.27</b>	<b>85.17</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>66.03</b>	<b>79.57</b>	<b>72.80</b>



## COOPERATOR PROFILE

ID# : 115-92-11

## FARM DESCRIPTION:

The cooperator has a 2054 acre farm with economic and agronomic data being supplied from a 150 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as flat. Organic matter content is 8.6%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to be low and moderate respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
barley	canola	barley	wheat	barley	canola	barley

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to reduce wind erosion. Other conservation goals are to improve soil organic matter, increase crop yields and profits, and to improve the overall condition of the land.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from his use of reduced cultivation techniques which have reduced the potential for wind erosion. Moisture management and a positive attitude towards conservation farming have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the low commodity prices currently available to producers.

## FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has not made any plans for changes to his operation in the future.

Economic Summary for (Code#:115) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Canola	Barley	-----
Yield .....					29.00	43.00	-----
Price .....					5.10	1.60	-----
<b>TOTAL .....</b>					<b>147.90</b>	<b>68.80</b>	<b>108.35</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					11.55	2.52	7.04
Seed treatment .....					0.00	1.31	.66
Fertilizer .....					28.85	20.14	24.50
Crop insurance .....					6.40	4.10	5.25
Herbicide .....					27.24	15.60	21.42
Insecticide .....					0.00	0.00	0.00
Repairs .....					6.65	5.78	6.22
Fuel, Oil and Lube...					3.73	3.34	3.53
Machine rent./cust.					3.38	3.38	3.38
Hired labour .....					0.00	0.00	0.00
Operating interest ...					3.47	1.64	2.56
<b>TOTAL .....</b>					<b>91.26</b>	<b>57.82</b>	<b>74.54</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					6.53	7.65	7.09
Capital Opp. Cost ...					2.93	3.35	3.14
Insurance, housing ..					.99	1.12	1.06
<b>TOTAL .....</b>					<b>10.45</b>	<b>12.13</b>	<b>11.29</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>101.72</b>	<b>69.94</b>	<b>85.83</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>56.64</b>	<b>10.98</b>	<b>33.81</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>46.18</b>	<b>-1.14</b>	<b>22.52</b>

## COOPERATOR PROFILE

ID# : 118-92-11

### FARM DESCRIPTION:

The cooperator has a 1440 acre farm with economic and agronomic data being supplied from a 50 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of fine texture, on land classified as flat. Organic matter content is 9.3%.

The cooperator feels that there is some potential for salinity problems on this field. Water and wind erosion possibilities are felt to be low and high respectively.

### CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
barley	barley	barley	barley

Forages and legumes are not included in the rotation.

### GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve the overall condition of the land. Other conservation goals are to improve soil organic matter, increase subsoil moisture, and to reduce water and wind erosion.

### MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from his management ability which keeps him aware of conservation farming techniques. An attitude to adopt progressive changes on the farm and more efficient use of machinery have also contributed.

### CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the lack of funds to make the necessary changes.

### FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to upgrade his tillage equipment such as conservation cultivator shovels and experimenting with rotary harrows.

Economic Summary for (Code#:118) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Barley	Barley	-----
Yield .....					40.00	40.00	-----
Price .....					1.16	1.40	-----
<b>TOTAL .....</b>					<b>46.40</b>	<b>56.00</b>	<b>51.20</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					3.84	2.50	3.17
Seed treatment .....					1.75	.90	1.33
Fertilizer .....					16.10	15.90	16.00
Crop insurance .....					2.00	10.50	6.25
Herbicide .....					9.40	15.67	12.54
Insecticide .....					0.00	0.00	0.00
Repairs .....					4.02	3.69	3.85
Fuel, Oil and Lube...					4.12	3.90	4.01
Machine rent./cust.					.00	.00	.00
Hired labour .....					0.00	0.00	0.00
Operating interest ..					1.52	1.44	1.48
<b>TOTAL .....</b>					<b>42.75</b>	<b>54.49</b>	<b>48.62</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					8.65	9.62	9.14
Capital Opp. Cost ...					4.94	5.12	5.03
Insurance, housing ..					1.71	1.77	1.74
<b>TOTAL .....</b>					<b>15.30</b>	<b>16.51</b>	<b>15.90</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>58.05</b>	<b>70.99</b>	<b>64.52</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>3.65</b>	<b>1.51</b>	<b>2.58</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>-11.65</b>	<b>-14.99</b>	<b>-13.32</b>



## COOPERATOR PROFILE

ID# : 122-92-11

## FARM DESCRIPTION:

The cooperator has a 1325 acre farm with economic and agronomic data being supplied from a 80 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of coarse texture, on land classified as hilly. Organic matter content is 9.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to both be high.

## CONSERVATION SYSTEM DESCRIPTION:

This is zero tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
canola	barley	fallow	canola	barley	fallow	canola

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to improve time management, increase subsoil moisture, and to reduce water and wind erosion.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from his technically advanced machinery. Reduced cultivation and use of livestock have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the high cost of inputs such as chemicals and fertilizers.

## FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has not made any plans for future changes to his farming operation.

Economic Summary for (Code#:122) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Wheat	Barley	Barley	-----
Yield .....				44.00	55.00	83.00	-----
Price .....				2.96	1.40	1.85	-----
<b>TOTAL .....</b>				<b>130.24</b>	<b>77.00</b>	<b>153.55</b>	<b>120.26</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				7.50	9.60	4.50	7.20
Seed treatment .....				.65	1.32	1.40	1.12
Fertilizer .....				11.23	12.00	1.60	8.28
Crop insurance .....				7.00	3.00	9.92	6.64
Herbicide .....				16.55	11.35	17.48	15.13
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				6.37	7.50	9.31	7.73
Fuel, Oil and Lube...				2.59	3.52	3.96	3.36
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				0.00	0.00	1.31	.44
Operating interest ..				3.03	1.86	1.37	2.08
<b>TOTAL .....</b>				<b>54.91</b>	<b>50.14</b>	<b>50.85</b>	<b>51.97</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				16.48	18.77	14.67	16.64
Capital Opp. Cost ...				8.09	9.19	9.67	8.98
Insurance, housing ..				2.75	3.16	3.30	3.07
<b>TOTAL .....</b>				<b>27.32</b>	<b>31.12</b>	<b>27.64</b>	<b>28.69</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>82.23</b>	<b>81.26</b>	<b>78.49</b>	<b>80.66</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>75.33</b>	<b>26.86</b>	<b>102.70</b>	<b>68.29</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>48.01</b>	<b>-4.26</b>	<b>75.06</b>	<b>39.60</b>

**LOCATION:**

1/2 mile northwest  
of Ryley

**COOPERATOR PROFILE**

ID# : 129-92-31

**FARM DESCRIPTION:**

The cooperator has a 1200 acre farm with economic and agronomic data being supplied from a 150 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.9%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are felt to both be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is conventional tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
barley	canola	wheat	barley	canola	wheat	barley

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve soil organic matter. The cooperator would also like to conserve soil moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his technically advanced machinery. Availability of chemicals, use of livestock, experience, an ability to finance/market, and moisture management have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator has not made any plans for future changes to his farming operation.

Economic Summary for (Code#:129) Rotation #:3 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Barley	Canola	Wheat	-----
Yield .....				80.00	25.00	38.00	-----
Price .....				1.50	5.30	2.08	-----
<b>TOTAL .....</b>				<b>120.00</b>	<b>132.50</b>	<b>79.04</b>	<b>110.51</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				6.00	5.04	8.00	6.35
Seed treatment .....				1.25	3.20	0.00	1.48
Fertilizer .....				28.01	21.90	19.00	22.97
Crop insurance .....				10.00	0.00	0.00	3.33
Herbicide .....				3.50	0.00	16.01	6.50
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				7.78	7.55	6.47	7.27
Fuel, Oil and Lube...				1.08	5.25	3.16	3.17
Machine rent./cust.				.00	.00	.00	.00
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				3.09	1.78	1.61	2.16
<b>TOTAL .....</b>				<b>60.72</b>	<b>44.72</b>	<b>54.24</b>	<b>53.23</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				12.78	9.34	6.26	9.46
Capital Opp. Cost ...				6.98	5.09	2.86	4.98
Insurance, housing ..				2.37	1.72	.98	1.69
<b>TOTAL .....</b>				<b>22.12</b>	<b>16.15</b>	<b>10.10</b>	<b>16.12</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>82.84</b>	<b>60.87</b>	<b>64.34</b>	<b>69.35</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>59.28</b>	<b>87.78</b>	<b>24.80</b>	<b>57.28</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>37.16</b>	<b>71.63</b>	<b>14.70</b>	<b>41.16</b>



## COOPERATOR PROFILE

ID# : 132-92-11

### FARM DESCRIPTION:

The cooperator has a 3000 acre farm with economic and agronomic data being supplied from a 120 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.9%.

The cooperator feels that there is potential for salinity problems on this field. Water and wind erosion possibilities are felt to both be moderate.

### CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
barley	barley	barley	canola	wheat	triticale	barley

Forages and legumes are not included in the rotation.

### GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to increase crop yields, improve soil organic matter, reduce perennial weeds, and to improve time management.

### MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from timeliness (due to many acres and not much manpower). Moisture management (the less tillage the more water you save), and weed control (proper tillage and chemical application at exact times) have also contributed.

### CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the high cost of inputs (chemicals, fertilizers, etc).

### FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has not made any plans for future changes to his farming operation.

Economic Summary for (Code#:132) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Barley	Barley	-----
Yield .....					35.00	40.00	-----
Price .....					1.75	1.85	-----
<b>TOTAL .....</b>					<b>61.25</b>	<b>74.00</b>	<b>67.63</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					2.75	2.50	2.62
Seed treatment .....					0.00	0.00	0.00
Fertilizer .....					13.70	10.00	11.85
Crop insurance .....					0.00	7.00	3.50
Herbicide .....					16.83	13.86	15.34
Insecticide .....					0.00	0.00	0.00
Repairs .....					2.38	7.02	4.70
Fuel, Oil and Lube...					4.96	6.09	5.53
Machine rent./cust.					1.00	.00	.50
Hired labour .....					0.00	.21	.10
Operating interest ..					1.90	1.29	1.59
<b>TOTAL .....</b>					<b>43.51</b>	<b>47.97</b>	<b>45.74</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					6.65	8.85	7.75
Capital Opp. Cost ...					3.17	4.72	3.95
Insurance, housing ..					1.06	1.60	1.33
<b>TOTAL .....</b>					<b>10.89</b>	<b>15.17</b>	<b>13.03</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>54.40</b>	<b>63.14</b>	<b>58.77</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>17.74</b>	<b>26.03</b>	<b>21.88</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>6.85</b>	<b>10.86</b>	<b>8.86</b>

## COOPERATOR PROFILE

ID# : 144-92-1'

## FARM DESCRIPTION:

The cooperator has a 755 acre farm with economic and agronomic data being supplied from a 155 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a dark brown type, of medium texture, on land classified as gently rolling. Organic matter content is 6.7%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to be low and moderate respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
canola	wheat	wheat	barley	barley	canola	wheat

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to leave the land in good condition. Other conservation goals are to increase profits, reduce perennial weeds, increase subsoil moisture, and to increase crop yields.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from attitude (valuing land stewardship and being able to use practices not considered conventional). Moisture management (extra moisture from minimum till made conservation pay), and chemicals (controlling tough weeds makes min-till possible) have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

## FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has not made any plans for future changes to his farming operation.

Economic Summary for (Code#:144) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Canola	Wheat	Wheat	-----
Yield .....				22.50	46.00	30.00	-----
Price .....				5.50	2.70	2.30	-----
<b>TOTAL .....</b>				<b>123.75</b>	<b>124.20</b>	<b>69.00</b>	<b>105.65</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				8.00	5.04	5.25	6.10
Seed treatment .....				0.00	1.00	1.30	.77
Fertilizer .....				26.21	24.66	22.12	24.33
Crop insurance .....				0.00	1.75	12.40	4.72
Herbicide .....				10.01	18.82	14.99	14.61
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				.00	.00	.00	.00
Fuel, Oil and Lube...				.00	.00	.00	.00
Machine rent./cust.				45.18	43.00	36.00	41.39
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				7.27	5.20	2.55	5.01
<b>TOTAL .....</b>				<b>96.66</b>	<b>99.47</b>	<b>94.60</b>	<b>96.91</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				.00	.00	.00	.00
Capital Opp. Cost ...				.00	.00	.00	.00
Insurance, housing ..				.00	.00	.00	.00
<b>TOTAL .....</b>				<b>.00</b>	<b>.00</b>	<b>.00</b>	<b>.00</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>96.66</b>	<b>99.47</b>	<b>94.60</b>	<b>96.91</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>27.09</b>	<b>24.73</b>	<b>-25.60</b>	<b>8.74</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>27.09</b>	<b>24.73</b>	<b>-25.60</b>	<b>8.74</b>



## COOPERATOR PROFILE

ID# : 148-92-11

## FARM DESCRIPTION:

The cooperator has a 1170 acre farm with economic and agronomic data being supplied from a 70 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as flat.

The cooperator feels that there is a potential for salinity problems on this field. Water and wind erosion possibilities are felt to be low and moderate respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is zero tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
canola	wheat	fallow	barley	canola	wheat	fallow

Forages and legumes are included in the rotation and is then cut for hay as well as grazing.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to leave the land in good condition. Other conservation goals are to increase profits, improve seedbed moisture, reduce wind erosion, and to improve time management.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from his machinery (the zero till drill allows the cooperator to seed into standing stubble). Chemicals (which do not require cultivating before seeding), and moisture management (to catch the snow) have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is low commodity prices.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to implement a better system to speed up the collection of chaff piles.

Economic Summary for (Code#:148) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Wheat	Flax	-----
Yield .....					35.00	15.00	-----
Price .....					2.00	4.00	-----
<b>TOTAL .....</b>					<b>70.00</b>	<b>60.00</b>	<b>65.00</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					8.40	5.00	6.70
Seed treatment .....					1.40	1.00	1.20
Fertilizer .....					25.00	17.06	21.03
Crop insurance .....					0.00	8.00	4.00
Herbicide .....					12.41	29.50	20.96
Insecticide .....					0.00	0.00	0.00
Repairs .....					4.97	5.57	5.27
Fuel, Oil and Lube...					5.65	5.37	5.51
Machine rent./cust.					.00	.00	.00
Hired labour .....					0.00	0.00	0.00
Operating interest ..					2.54	1.93	2.23
<b>TOTAL .....</b>					<b>60.36</b>	<b>73.43</b>	<b>66.90</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					3.63	7.61	5.62
Capital Opp. Cost ...					4.41	4.27	4.34
Insurance, housing ..					1.50	1.46	1.48
<b>TOTAL .....</b>					<b>9.54</b>	<b>13.34</b>	<b>11.44</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>69.90</b>	<b>86.76</b>	<b>78.33</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>9.64</b>	<b>-13.43</b>	<b>-1.90</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>.10</b>	<b>-26.76</b>	<b>-13.33</b>

## COOPERATOR PROFILE

ID# : 149-92-11

## FARM DESCRIPTION:

The cooperator has a 2400 acre farm with economic and agronomic data being supplied from a 130 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a thin black type, of coarse texture, on land classified as gently rolling. Organic matter content is 3.3%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to both be high.

## CONSERVATION SYSTEM DESCRIPTION:

This is zero tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
Wheat	wheat	canola	wheat	wheat	wheat	barley

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to reduce wind erosion. Other conservation goals are to improve soil organic matter, leave the land in good condition, reduce perennial weeds, and to increase crop yields.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from availability of chemicals. Reduced cultivation, machinery, moisture management, and attitude have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the concern for environmental inputs of chemicals.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to direct seed canola.

Economic Summary for (Code#:149) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Wheat	Canola	-----
Yield .....					25.00	19.00	-----
Price .....					2.17	4.72	-----
<b>TOTAL .....</b>					<b>54.25</b>	<b>89.68</b>	<b>71.97</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					5.76	2.20	3.98
Seed treatment .....					4.80	1.00	2.90
Fertilizer .....					24.96	24.70	24.83
Crop insurance .....					2.89	9.85	6.37
Herbicide .....					35.45	11.04	23.25
Insecticide .....					0.00	0.00	0.00
Repairs .....					6.13	9.51	7.82
Fuel, Oil and Lube...					2.93	4.38	3.66
Machine rent./cust.					.00	.00	.00
Hired labour .....					3.70	.31	2.01
Operating interest ..					3.24	1.94	2.59
<b>TOTAL .....</b>					<b>89.87</b>	<b>64.93</b>	<b>77.40</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					7.84	5.98	6.91
Capital Opp. Cost ...					4.43	7.99	6.21
Insurance, housing ..					1.52	2.67	2.09
<b>TOTAL .....</b>					<b>13.79</b>	<b>16.64</b>	<b>15.22</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>103.66</b>	<b>81.57</b>	<b>92.61</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>-35.62</b>	<b>24.75</b>	<b>-5.43</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>-49.41</b>	<b>8.11</b>	<b>-20.65</b>



**LOCATION:**

12 miles southeast  
of Mannville

**COOPERATOR PROFILE**

ID# : 151-92-11

**FARM DESCRIPTION:**

The cooperator has a 4010 acre farm with economic and agronomic data being supplied from a 133 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a thin black type, of fine texture, on land classified as flat. Organic matter content is 4.38%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to be moderate and low respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
wheat	fallow	canola	barley	peas	barley	canola

Forages and legumes are not included in the rotation.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the need to reduce wind erosion. Other conservation goals are to increase profits, improve seedbed moisture, improve soil organic matter, and to improve the overall quality of the soil.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from management's attitude towards being open minded about trying different cropping methods. Learning from past mistakes and remaining flexible have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the concern about the environmental impact that chemicals have on the soil.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to make a full conversion to zero till and to save chaff to spread more effectively when not baling.

Economic Summary for (Code#:151) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Fallow	Canola	-----
Yield .....					0.00	19.00	-----
Price .....					0.00	6.55	-----
<b>TOTAL .....</b>					<b>0.00</b>	<b>124.45</b>	<b>62.23</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					0.00	2.10	1.05
Seed treatment .....					0.00	.40	.20
Fertilizer .....					0.00	13.86	6.93
Crop insurance .....					0.00	8.75	4.38
Herbicide .....					28.95	15.00	21.97
Insecticide .....					0.00	0.00	0.00
Repairs .....					.91	10.11	5.51
Fuel, Oil and Lube...					.75	5.51	3.13
Machine rent./cust.					1.00	1.00	1.00
Hired labour .....					0.00	5.34	2.67
Operating interest ..					1.16	3.48	2.32
<b>TOTAL .....</b>					<b>32.76</b>	<b>65.55</b>	<b>49.15</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					.44	3.68	2.06
Capital Opp. Cost ...					.40	4.12	2.26
Insurance, housing ..					.13	1.39	.76
<b>TOTAL .....</b>					<b>.97</b>	<b>9.19</b>	<b>5.08</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>33.73</b>	<b>74.74</b>	<b>54.24</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>-32.76</b>	<b>58.90</b>	<b>13.07</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>-33.73</b>	<b>49.71</b>	<b>7.99</b>

## COOPERATOR PROFILE

ID# : 104-92-11

## FARM DESCRIPTION:

The cooperator has a 1400 acre farm with economic and agronomic data being supplied from a 120 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling. Organic matter content is 5.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to be low and moderate respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is reduced tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
canola	wheat	wheat	barley	canola	barley	barley

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to improve soil organic matter, increase crop yields, improve time management, and to leave the land in good condition.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from proper management of straw. Availability of advanced chemicals and reduced cultivation have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to eliminate fallow, try one pass seeding, and convert to straight cut combining.

Economic Summary for (Code#:104) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Canola	Wheat	Wheat	-----
Yield .....				30.00	70.00	50.00	-----
Price .....				5.50	1.60	1.80	-----
<b>TOTAL .....</b>				<b>165.00</b>	<b>112.00</b>	<b>90.00</b>	<b>91.75</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			0.00	2.58	7.20	8.75	4.63
Seed treatment .....			0.00	2.42	1.89	0.00	1.08
Fertilizer .....			0.00	18.51	25.20	24.12	16.96
Crop insurance .....			0.00	7.37	3.38	4.50	3.81
Herbicide .....			14.00	18.23	17.17	17.25	16.66
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			1.31	4.62	6.36	6.11	4.60
Fuel, Oil and Lube...			1.73	3.44	3.92	2.96	3.01
Machine rent./cust.			.00	3.10	.00	.00	.78
Hired labour .....			0.00	0.00	0.00	0.00	0.00
Operating interest ..			.91	3.85	3.41	2.62	2.70
<b>TOTAL .....</b>			<b>17.94</b>	<b>64.12</b>	<b>68.53</b>	<b>66.31</b>	<b>54.22</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			1.44	4.90	4.14	1.97	3.11
Capital Opp. Cost ...			1.08	3.21	3.17	3.34	2.70
Insurance, housing ..			.36	1.08	1.07	1.12	.91
<b>TOTAL .....</b>			<b>2.88</b>	<b>9.19</b>	<b>8.38</b>	<b>6.43</b>	<b>6.72</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>20.82</b>	<b>73.31</b>	<b>76.91</b>	<b>72.74</b>	<b>60.95</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-17.94</b>	<b>100.88</b>	<b>43.47</b>	<b>23.69</b>	<b>37.53</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>-20.82</b>	<b>91.69</b>	<b>35.09</b>	<b>17.26</b>	<b>30.80</b>



**LOCATION:**

8 miles east of  
Legal

**COOPERATOR PROFILE**

ID# : 110-92-31

**FARM DESCRIPTION:**

The cooperator has a 1050 acre farm with economic and agronomic data being supplied from a 100 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of fine texture, on land classified as flat. Organic matter content is 7.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to be low and moderate respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994
barley	clover	canola	oats	barley

Forages and legumes are included in the rotation and are utilized by being incorporated as green manure or cut for silage.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to increase profits. Other conservation goals are to improve soil organic matter content, and to reduce wind erosion and fertilizer inputs.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from his financing and marketing ability which is required to do a good job. Reduced cultivation and use of legumes in the rotation have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the low commodity prices currently being received by crop producers.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to try seeding peas with a zero till drill.

Economic Summary for (Code#:110) Rotation #:3 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Canola	-----
Yield .....						43.00	-----
Price .....						5.80	-----
<b>TOTAL .....</b>						<b>249.40</b>	<b>249.40</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						6.72	6.72
Seed treatment .....						6.00	6.00
Fertilizer .....						12.60	12.60
Crop insurance .....							
Herbicide .....						19.16	19.16
Insecticide .....						0.00	0.00
Repairs .....						7.88	7.88
Fuel, Oil and Lube...						5.72	5.72
Machine rent./cust.						3.01	3.01
Hired labour .....						0.00	0.00
Operating interest ..						2.67	2.67
<b>TOTAL .....</b>						<b>63.76</b>	<b>63.76</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						9.49	9.49
Capital Opp. Cost ...						6.04	6.04
Insurance, housing ..						2.07	2.07
<b>TOTAL .....</b>						<b>17.60</b>	<b>17.60</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>81.36</b>	<b>81.36</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>185.64</b>	<b>185.64</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>168.04</b>	<b>168.04</b>

## COOPERATOR PROFILE

ID# : 112-92-11

## FARM DESCRIPTION:

The cooperator has a 1240 acre farm with economic and agronomic data being supplied from a 25 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of medium texture, on land classified as gently rolling. Organic matter content is 4.2%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to both be moderate.

## CONSERVATION SYSTEM DESCRIPTION:

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
barley	barley	alfalfa	alfalfa	alfalfa	alfalfa	wheat

Forages and legumes are included in the rotation and are utilized by being cut for hay.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to increase soil organic matter. Other conservation goals are to increase profits, control weeds, reduce water erosion, and to improve the overall condition of the land.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from using forages in the rotation. A ready market for hay and the desire and persistence to make conservation farming work have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the high cost of inputs such as chemicals and fertilizer.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to add peas to the crop rotation.

Economic Summary for (Code#:112) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Barley	Barley	Alfalfa	-----
Yield .....				85.00	70.00	2.08	-----
Price .....				1.50	1.30	20.00	-----
<b>TOTAL .....</b>				<b>127.50</b>	<b>91.00</b>	<b>41.60</b>	<b>86.70</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				6.00	4.80	10.00	6.93
Seed treatment .....				0.00	0.00	0.00	0.00
Fertilizer .....				20.85	24.90	10.50	18.75
Crop insurance .....				0.00	9.00		4.50
Herbicide .....				7.70	20.36	0.00	9.35
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				6.20	6.58	4.35	5.71
Fuel, Oil and Lube...				4.42	5.19	2.61	4.08
Machine rent./cust.				3.50	.72	.00	1.41
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				2.71	4.08	.71	2.50
<b>TOTAL .....</b>				<b>51.38</b>	<b>75.63</b>	<b>28.17</b>	<b>51.73</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				6.20	5.28	1.93	4.47
Capital Opp. Cost ...				3.67	3.24	1.61	2.84
Insurance, housing ..				1.24	1.10	.54	.96
<b>TOTAL .....</b>				<b>11.11</b>	<b>9.62</b>	<b>4.07</b>	<b>8.27</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>62.49</b>	<b>85.25</b>	<b>32.25</b>	<b>60.00</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>76.12</b>	<b>15.37</b>	<b>13.43</b>	<b>34.97</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>65.01</b>	<b>5.75</b>	<b>9.35</b>	<b>26.70</b>



## COOPERATOR PROFILE

ID# : 145-92-13

## FARM DESCRIPTION:

The cooperator has a 2880 acre farm with economic and agronomic data being supplied from a 50 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of medium texture, on land classified as gently rolling.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to both be moderate.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
------	------	------	------	------	------	------

barley	wheat	barley	canola	wheat	barley	barley
--------	-------	--------	--------	-------	--------	--------

Forages and legumes are included in the rotation and utilized for incorporation/green manure.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve soil organic matter. Other conservation goals are to reduce fertilizer inputs, increase profits and yields, and to leave the land in good condition.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from the use of legumes/forages to increase the organic matter content and fertility of the soil. Reduced cultivation (decreases the destruction of organic matter), and rotation choice have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the current low prices being received for most commodities.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to purchase an airseeder and try single tillage or direct seeding.

Economic Summary for (Code#:145) Rotation #:1 Field #:3

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Barley	-----
Yield .....						90.00	-----
Price .....						1.40	-----
<b>TOTAL .....</b>						<b>126.00</b>	<b>126.00</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						4.37	4.37
Seed treatment .....						1.50	1.50
Fertilizer .....						22.57	22.57
Crop insurance .....							
Herbicide .....						11.83	11.83
Insecticide .....						0.00	0.00
Repairs .....						8.27	8.27
Fuel, Oil and Lube...						4.31	4.31
Machine rent./cust.						.00	.00
Hired labour .....						1.00	1.00
Operating interest ..						1.75	1.75
<b>TOTAL .....</b>						<b>55.60</b>	<b>55.60</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						6.68	6.68
Capital Opp. Cost ...						4.92	4.92
Insurance, housing ..						1.68	1.68
<b>TOTAL .....</b>						<b>13.28</b>	<b>13.28</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>68.87</b>	<b>68.87</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>70.40</b>	<b>70.40</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>57.13</b>	<b>57.13</b>

## COOPERATOR PROFILE

ID# : 145-92-21

## FARM DESCRIPTION:

The cooperator has a 2880 acre farm with economic and agronomic data being supplied from a 130 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a thin black type, of coarse texture, on land classified as gently rolling.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to both be moderate.

## CONSERVATION SYSTEM DESCRIPTION:

This is a reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
barley	barley	wheat	barley	barley	barley	wheat

Forages and legumes are included in the rotation and utilized for incorporation/green manure.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve soil organic matter. Other conservation goals are to reduce fertilizer inputs, increase profits and yields, and to leave the land in good condition.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from the use of legumes/forages to increase the organic matter content and fertility of the soil. Reduced cultivation (decreases the destruction of organic matter), and rotation choice have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the current low prices being received for most commodities.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to purchase an airseeder and try single tillage or direct seeding.

Economic Summary for (Code#:145) Rotation #:2 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Wheat	-----
Yield .....						45.00	-----
Price .....						1.81	-----
<b>TOTAL .....</b>						<b>81.45</b>	<b>81.45</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						7.00	7.00
Seed treatment .....						1.51	1.51
Fertilizer .....						22.72	22.72
Crop insurance .....							
Herbicide .....						17.50	17.50
Insecticide .....						0.00	0.00
Repairs .....						7.82	7.82
Fuel, Oil and Lube...						3.71	3.71
Machine rent./cust.						.00	.00
Hired labour .....						1.28	1.28
Operating interest ..						2.05	2.05
<b>TOTAL .....</b>						<b>63.59</b>	<b>63.59</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						6.32	6.32
Capital Opp. Cost ...						4.36	4.36
Insurance, housing ..						1.50	1.50
<b>TOTAL .....</b>						<b>12.18</b>	<b>12.18</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>75.77</b>	<b>75.77</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>17.86</b>	<b>17.86</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>5.68</b>	<b>5.68</b>



**LOCATION:**

2.5 miles south of  
Josephburg

**COOPERATOR PROFILE**

ID# : 150-92-11

**FARM DESCRIPTION:**

The cooperator has a 760 acre farm with economic and agronomic data being supplied from a 80 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a black type, of fine texture, on land classified as gently rolling. Organic matter content is 8.8%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to both be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994
canola	barley	peas	oats	barley

Forages and legumes are included in the rotation and utilized by being incorporated as green manure after being cut for hay.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve soil organic matter. Other conservation goals are to reduce wind erosion and increase profits.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from management's attitude towards accepting change and balancing short term economics while ensuring sustainability. Keeping good crop records and knowledge of machinery characteristics have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the control of weeds on a year to year basis.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to explore the possibility of direct seeding barley into pea stubble and using a more erect standing pea variety for easier harvest.

Economic Summary for (Code#:150) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....			Barley	Canola	Barley	Peas	-----
Yield .....			72.00	48.00	65.00	50.00	-----
Price .....			2.12	6.50	1.04	4.50	-----
<b>TOTAL .....</b>			<b>152.64</b>	<b>312.00</b>	<b>67.60</b>	<b>225.00</b>	<b>189.31</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			7.12	3.36	7.68	35.00	13.29
Seed treatment .....			1.30	2.66	1.92	.08	1.49
Fertilizer .....			23.10	39.07	23.90	10.24	24.08
Crop insurance .....			5.60	13.50	3.00	8.00	7.53
Herbicide .....			19.94	29.92	5.00	14.31	17.29
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			1.47	2.35	3.22	2.84	2.47
Fuel, Oil and Lube...			2.16	4.55	5.65	5.66	4.50
Machine rent./cust.			.00	.00	.17	.00	.04
Hired labour .....			0.00	0.00	0.00	0.00	0.00
Operating interest ..			3.24	7.59	2.04	2.59	3.87
<b>TOTAL .....</b>			<b>63.93</b>	<b>102.99</b>	<b>52.58</b>	<b>78.71</b>	<b>74.55</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			18.21	20.32	13.35	14.14	16.50
Capital Opp. Cost ...			7.72	9.20	8.22	8.07	8.30
Insurance, housing ..			2.63	3.15	2.79	2.75	2.83
<b>TOTAL .....</b>			<b>28.55</b>	<b>32.67</b>	<b>24.35</b>	<b>24.96</b>	<b>27.63</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>92.48</b>	<b>135.67</b>	<b>76.93</b>	<b>103.67</b>	<b>102.19</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>88.71</b>	<b>209.01</b>	<b>15.02</b>	<b>146.29</b>	<b>114.76</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>60.16</b>	<b>176.33</b>	<b>-9.33</b>	<b>121.33</b>	<b>87.12</b>

## COOPERATOR PROFILE

ID# : 158-92-11

## FARM DESCRIPTION:

The cooperator has a 1300 acre farm with economic and agronomic data being supplied from a 50 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of medium texture, on land classified as gently rolling. Organic matter content is 4.4%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are both felt to be moderate.

## CONSERVATION SYSTEM DESCRIPTION:

This is a conventional tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
hay	wheat	silage	barley	barley	hay	hay

Forages and legumes are included in the rotation and utilized by being cut for hay.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve soil organic matter. Other conservation goals are to reduce the potential for salinity, reduce fertilizer inputs, increase crop yields, and to improve the overall condition of the soil.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from the opportunity to utilize forages for hay and manure from the livestock operation. Flexibility by management and using forages in the rotation have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the impact that government programs have in the cropping decisions being made by producers.

## FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has no plans for any future changes to his farm operation.

Economic Summary for (Code#:158) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Silage	-----
Yield .....						2.00	-----
Price .....						20.00	-----
<b>TOTAL .....</b>						<b>40.00</b>	<b>40.00</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						6.25	6.25
Seed treatment .....						1.00	1.00
Fertilizer .....						62.60	62.60
Crop insurance .....						0.00	0.00
Herbicide .....						2.67	2.67
Insecticide .....						0.00	0.00
Repairs .....						11.21	11.21
Fuel, Oil and Lube...						5.33	5.33
Machine rent./cust.						.00	.00
Hired labour .....						0.00	0.00
Operating interest ..						4.43	4.43
<b>TOTAL .....</b>						<b>93.50</b>	<b>93.50</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						8.25	8.25
Capital Opp. Cost ...						6.85	6.85
Insurance, housing ..						2.34	2.34
<b>TOTAL .....</b>						<b>17.45</b>	<b>17.45</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>110.95</b>	<b>110.95</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>-53.50</b>	<b>-53.50</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>-70.95</b>	<b>-70.95</b>



## COOPERATOR PROFILE

ID# : 159-92-11

## FARM DESCRIPTION:

The cooperator has a 3065 acre farm with economic and agronomic data being supplied from a 140 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of medium texture, on land classified as gently rolling. Organic matter content is 3.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are felt to both be low.

## CONSERVATION SYSTEM DESCRIPTION:

This is zero tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
oats	canola	wheat	canola	oats	canola	barley

Forages and legumes are not included in the rotation.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to increase crop yields and profits. Other conservation goals are to control weeds, reduce fertilizer inputs, and to improve time management.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from the need to become familiar with conservation farming machinery. Reduced cultivation and proper attention to weed control have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the control of weeds on a year to year basis.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to try spray Roundup prior to harvest as well as harvesting earlier in the year.

Economic Summary for (Code#:159) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Wheat	-----
Yield .....						25.00	-----
Price .....						2.20	-----
<b>TOTAL .....</b>						<b>55.00</b>	<b>55.00</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						4.50	4.50
Seed treatment .....						0.00	0.00
Fertilizer .....						15.20	15.20
Crop insurance .....						3.50	3.50
Herbicide .....						27.96	27.96
Insecticide .....						0.00	0.00
Repairs .....						2.26	2.26
Fuel, Oil and Lube...						1.58	1.58
Machine rent./cust.						10.00	10.00
Hired labour .....						1.07	1.07
Operating interest ..						1.97	1.97
<b>TOTAL .....</b>						<b>68.04</b>	<b>68.04</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						13.95	13.95
Capital Opp. Cost ...						5.11	5.11
Insurance, housing ..						1.79	1.79
<b>TOTAL .....</b>						<b>20.85</b>	<b>20.85</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>88.88</b>	<b>88.88</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>-13.04</b>	<b>-13.04</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>-33.88</b>	<b>-33.88</b>

## COOPERATOR PROFILE

ID# : 901-92-11

### FARM DESCRIPTION:

The cooperator has a 1400 acre farm with economic and agronomic data being supplied from a 30 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of coarse texture, on land classified as hilly. Organic matter content is 3.0%.

The cooperator feels that there is no potential for salinity problems on this field. However water and wind erosion possibilities are felt to be moderate and low respectively.

### CONSERVATION SYSTEM DESCRIPTION:

This is a conventional tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
alfalfa	alfalfa	oats	barley	barley	alfalfa	alfalfa

Forages are included in the rotation and cut for hay.

### GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to leave the land in good condition.

### MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from the use of forages in the rotation.

### CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

### FUTURE CHANGE ANTICIPATED:

For the time being the cooperator has not made any plans for any future changes.

Economic Summary for (Code#:901) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Oats	-----
Yield .....						42.00	-----
Price .....						1.46	-----
<b>TOTAL .....</b>						<b>61.32</b>	<b>61.32</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						6.25	6.25
Seed treatment .....						0.00	0.00
Fertilizer .....						15.25	15.25
Crop insurance .....							
Herbicide .....						4.26	4.26
Insecticide .....						0.00	0.00
Repairs .....						51.00	51.00
Fuel, Oil and Lube...						17.10	17.10
Machine rent./cust.						.60	.60
Hired labour .....						0.00	0.00
Operating interest ..						2.60	2.60
<b>TOTAL .....</b>						<b>97.07</b>	<b>97.07</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						53.17	53.17
Capital Opp. Cost ...						28.66	28.66
Insurance, housing ..						9.69	9.69
<b>TOTAL .....</b>						<b>91.53</b>	<b>91.53</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>188.61</b>	<b>188.61</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>-35.75</b>	<b>-35.75</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>-127.29</b>	<b>-127.29</b>



**LOCATION:**

6 miles northeast  
of Onoway

**COOPERATOR PROFILE**

ID# : 901-92-12

**FARM DESCRIPTION:**

The cooperator has a 1400 acre farm with economic and agronomic data being supplied from a 30 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of coarse texture, on land classified as hilly. Organic matter content is 3.0%.

The cooperator feels that there is no potential for salinity problems on this field. However water and wind erosion possibilities are felt to be moderate and low respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a conventional tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995	1996
alfalfa	alfalfa	oats	barley	barley	alfalfa	alfalfa

Forages are included in the rotation and cut for hay.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to leave the land in good condition.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from the use of forages in the rotation.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator has not made any plans for any future changes.

Economic Summary for (Code#:901) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....						Oats	-----
Yield .....						46.00	-----
Price .....						1.46	-----
<b>TOTAL .....</b>						<b>67.16</b>	<b>67.16</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....						6.25	6.25
Seed treatment .....						0.00	0.00
Fertilizer .....						13.85	13.85
Crop insurance .....							
Herbicide .....						20.46	20.46
Insecticide .....						0.00	0.00
Repairs .....						36.26	36.26
Fuel, Oil and Lube...						8.79	8.79
Machine rent./cust.						4.10	4.10
Hired labour .....						0.00	0.00
Operating interest ..						3.41	3.41
<b>TOTAL .....</b>						<b>93.12</b>	<b>93.12</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....						39.96	39.96
Capital Opp. Cost ...						18.86	18.86
Insurance, housing ..						6.42	6.42
<b>TOTAL .....</b>						<b>65.24</b>	<b>65.24</b>
<b>TOTAL COST OF PRODUCTION .</b>						<b>158.36</b>	<b>158.36</b>
<b>CONTRIBUTION MARGIN .....</b>						<b>-25.96</b>	<b>-25.96</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>						<b>-91.20</b>	<b>-91.20</b>

**LOCATION:**

6 miles southeast  
of Nampa

**COOPERATOR PROFILE**

ID# : 123-92-12

**FARM DESCRIPTION:**

The cooperator has a 2720 acre farm with economic and agronomic data being supplied from a 160 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of fine texture, on land classified as flat. Organic matter content is 5.0%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to be moderate and low respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994	1995
wheat	wheat	alfalfa	alfalfa	alfalfa	alfalfa

Forages and legumes are included in the rotation and utilized for dehy production.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve time management. Other conservation goals are to reduce fertilizer inputs, increase profits, and to leave the land in good condition.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from attitude (wanting to do things differently). Reduced cultivation and management of straw have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the lack of adequate equipment.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to convert to zero tillage when appropriate equipment is available.

Economic Summary for (Code#:123) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Wheat	Alfalfa	-----
Yield .....					55.00	2.39	-----
Price .....					2.32	24.00	-----
<b>TOTAL .....</b>					<b>127.60</b>	<b>57.36</b>	<b>92.48</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					22.40	0.00	11.20
Seed treatment .....					0.00	0.00	0.00
Fertilizer .....					18.20	0.00	9.10
Crop insurance .....					4.39		4.39
Herbicide .....					8.50	0.00	4.25
Insecticide .....					0.00	0.00	0.00
Repairs .....					7.59	.67	4.13
Fuel, Oil and Lube...					3.72	.34	2.03
Machine rent./cust.					.00	.00	.00
Hired labour .....					10.00	.94	5.47
Operating interest ..					2.82	.03	1.42
<b>TOTAL .....</b>					<b>77.63</b>	<b>1.97</b>	<b>39.80</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					10.34	.17	5.25
Capital Opp. Cost ...					8.83	.69	4.76
Insurance, housing ..					3.00	.24	1.62
<b>TOTAL .....</b>					<b>22.17</b>	<b>1.10</b>	<b>11.63</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>99.80</b>	<b>3.07</b>	<b>51.43</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>49.97</b>	<b>55.39</b>	<b>52.68</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>27.80</b>	<b>54.29</b>	<b>41.05</b>



**LOCATION:**

4 miles north of  
Lowe

**COOPERATOR PROFILE**

ID# : 127-92-11

**FARM DESCRIPTION:**

The cooperator has a 800 acre farm with economic and agronomic data being supplied from a 75 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of fine texture, on land classified as flat. Organic matter content is 3.5%.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to both be moderate.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
wheat	wheat/clover	clover incorp.	wheat

Forages and legumes are included in the rotation and utilized for incorporation/green manure.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve soil organic matter. Other conservation goals to increase subsoil moisture, improve seedbed moisture, increase crop yields, and to leave the land in good condition.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from the use of legumes/forages (to soften the soil) in the crop rotation. Reduced cultivation and moisture management have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is the climatic factors that are prevalent in the area.

**FUTURE CHANGE ANTICIPATED:**

With respect to important management decisions to be made in the future, the cooperator plans to convert over towards more minimum till seeding.

Economic Summary for (Code#:127) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....	Wheat	Clover	Clov. In	Fallow	Wheat Clov. Inc	-----	-----
Yield .....	48.00	150.00	0.00		50.00	0.00	-----
Price .....	4.50	.41	0.00		2.01	0.00	-----
<b>TOTAL .....</b>	<b>216.00</b>	<b>61.50</b>	<b>0.00</b>	<b>0.00</b>	<b>100.50</b>	<b>0.00</b>	<b>63.00</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....	14.60	0.00	0.00	0.00	6.30	0.00	3.48
Seed treatment .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fertilizer .....	13.61	0.00	0.00	0.00	15.80	0.00	4.90
Crop insurance .....	0.00	0.00	0.00	0.00		11.02	2.76
Herbicide .....	9.90	0.00	0.00	0.00	1.44	0.00	1.89
Insecticide .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Repairs .....	2.96	1.38	.63	.89	5.04	2.74	2.27
Fuel, Oil and Lube...	2.72	.97	1.41	1.58	3.41	2.87	2.16
Machine rent./cust.	.00	.00	.00	.00	1.00	.00	.17
Hired labour .....	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Operating interest ..	2.50	.09	.09	.12	1.47	.34	.77
<b>TOTAL .....</b>	<b>46.29</b>	<b>2.44</b>	<b>2.13</b>	<b>2.59</b>	<b>34.46</b>	<b>16.98</b>	<b>17.48</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....	4.94	2.98	.32	1.77	3.74	.88	2.44
Capital Opp. Cost ...	4.32	1.75	1.03	1.14	3.37	1.82	2.24
Insurance, housing ..	1.49	.62	.35	.39	1.15	.61	.77
<b>TOTAL .....</b>	<b>10.76</b>	<b>5.35</b>	<b>1.70</b>	<b>3.29</b>	<b>8.26</b>	<b>3.31</b>	<b>5.45</b>
<b>TOTAL COST OF PRODUCTION .</b>	<b>57.04</b>	<b>7.79</b>	<b>3.82</b>	<b>5.88</b>	<b>42.73</b>	<b>20.29</b>	<b>22.93</b>
<b>CONTRIBUTION MARGIN .....</b>	<b>169.71</b>	<b>59.06</b>	<b>-2.13</b>	<b>-2.59</b>	<b>66.04</b>	<b>-16.98</b>	<b>45.52</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>	<b>158.96</b>	<b>53.71</b>	<b>-3.82</b>	<b>-5.88</b>	<b>57.77</b>	<b>-20.29</b>	<b>40.07</b>

**LOCATION:**

1 mile north of  
Brownvale

**COOPERATOR PROFILE**

ID# : 134-92-11

**FARM DESCRIPTION:**

The cooperator has a 1890 acre farm with economic and agronomic data being supplied from a 110 acre field. The cooperator has two fields enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of medium texture, on land classified as flat.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to be moderate and low respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993	1994
oats/peas	canola	wheat	fallow	clover

Forages and legumes are included in the rotation and utilized for incorporation/green manure.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to reduce water erosion. Other conservation goals to increase subsoil moisture, increase crop yields, reduce fertilizer inputs, and to reduce wind erosion.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from the machinery. Reduced cultivation and chemicals have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator has no plans for any future changes.

Economic Summary for (Code#:134) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....			Clov. In	Wheat	Wheat	Wheat	-----
Yield .....			0.00	60.00	35.00	38.00	-----
Price .....			0.00	3.15	1.78	1.78	-----
<b>TOTAL .....</b>			<b>0.00</b>	<b>189.00</b>	<b>62.30</b>	<b>67.64</b>	<b>79.74</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			0.00	6.75	4.50	4.00	3.81
Seed treatment .....			0.00	0.00	2.70	1.25	.99
Fertilizer .....			0.00	0.00	6.40	7.10	3.38
Crop insurance .....			0.00	4.10	0.00	0.00	1.03
Herbicide .....			0.00	15.44	8.47	14.53	9.61
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			1.80	5.87	6.65	7.12	5.36
Fuel, Oil and Lube...			4.59	5.22	6.17	8.05	6.01
Machine rent./cust.			.00	.00	.00	.00	.00
Hired labour .....			0.00	0.00	0.00	0.00	0.00
Operating interest ..			.28	1.81	1.50	1.20	1.20
<b>TOTAL .....</b>			<b>6.68</b>	<b>39.19</b>	<b>36.39</b>	<b>43.26</b>	<b>31.38</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			1.25	5.34	4.66	4.79	4.01
Capital Opp. Cost ...			1.75	3.41	3.28	4.55	3.25
Insurance, housing ..			.57	1.17	1.12	1.55	1.10
<b>TOTAL .....</b>			<b>3.57</b>	<b>9.91</b>	<b>9.07</b>	<b>10.88</b>	<b>8.36</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>10.25</b>	<b>49.11</b>	<b>45.46</b>	<b>54.14</b>	<b>39.74</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-6.68</b>	<b>149.81</b>	<b>25.91</b>	<b>24.38</b>	<b>48.36</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>-10.25</b>	<b>139.89</b>	<b>16.84</b>	<b>13.50</b>	<b>40.00</b>



**LOCATION:**

1 mile north of  
Brownvale

**COOPERATOR PROFILE**

ID# : 134-92-12

**FARM DESCRIPTION:**

The cooperator has a 1890 acre farm with economic and agronomic data being supplied from a 120 acre field. The cooperator has two fields enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of medium texture, on land classified as flat.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to be moderate and low respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992
oats/peas	canola	peas/canola

Forages and legumes are included in the rotation and utilized for incorporation/green manure.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to reduce water erosion. Other conservation goals to increase subsoil moisture, increase crop yields, reduce fertilizer inputs, and to reduce wind erosion.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from the machinery. Reduced cultivation and chemicals have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator has no plans for any future changes.

Economic Summary for (Code#:134) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....			Clov. In	Oats	Canola	Peas/Can	-----
Yield .....			0.00	130.00	16.00	29.00	-----
Price .....			0.00	1.69	4.95	6.08	-----
<b>TOTAL .....</b>			<b>0.00</b>	<b>219.70</b>	<b>79.20</b>	<b>176.32</b>	<b>118.81</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			0.00	7.02	3.20	2.00	3.06
Seed treatment .....			0.00	.30	3.93	2.00	1.56
Fertilizer .....			0.00	0.00	11.35	15.10	6.61
Crop insurance .....			0.00	0.00	0.00	0.00	0.00
Herbicide .....			0.00	6.50	6.47	0.00	3.24
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			1.80	5.43	6.47	5.79	4.87
Fuel, Oil and Lube...			2.64	5.93	6.99	6.21	5.45
Machine rent./cust.			.00	.00	.00	.00	.00
Hired labour .....			0.00	0.00	0.00	0.00	0.00
Operating interest ..			.20	1.44	1.58	.92	1.03
<b>TOTAL .....</b>			<b>4.64</b>	<b>26.62</b>	<b>40.00</b>	<b>32.03</b>	<b>25.82</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			1.25	17.63	10.20	10.13	9.80
Capital Opp. Cost ...			1.75	7.12	5.26	5.72	4.96
Insurance, housing ..			.57	2.48	1.82	1.98	1.71
<b>TOTAL .....</b>			<b>3.57</b>	<b>27.22</b>	<b>17.27</b>	<b>17.84</b>	<b>16.48</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>8.21</b>	<b>53.85</b>	<b>57.27</b>	<b>49.86</b>	<b>42.30</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-4.64</b>	<b>193.08</b>	<b>39.20</b>	<b>144.29</b>	<b>92.98</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>-8.21</b>	<b>165.85</b>	<b>21.93</b>	<b>126.46</b>	<b>76.51</b>

**LOCATION:**

11 miles southwest  
of Falher

**COOPERATOR PROFILE**

ID# : 135-92-11

**FARM DESCRIPTION:**

The cooperator has a 1960 acre farm with economic and agronomic data being supplied from a 160 acre field. The cooperator has two fields enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of fine texture, on land classified as flat. Organic matter content is 4.26%

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to both be low.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
alfalfa	wheat	canola	wheat

Forages and legumes are included in the rotation and utilized for incorporation/green manure.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to reduce perennial weeds. The other conservation goal is to improve seedbed moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from reduced cultivation. Chemicals have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator has no plans for any future changes.

Economic Summary for (Code#:135) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....			Alfalfa	Wheat	Canola	Canola	-----
Yield .....			0.00	44.00	30.00	18.00	-----
Price .....			0.00	3.15	4.75	6.25	-----
<b>TOTAL .....</b>			<b>0.00</b>	<b>138.60</b>	<b>142.50</b>	<b>112.50</b>	<b>98.40</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....			0.00	5.67	1.40	4.00	2.77
Seed treatment .....			0.00	0.00	4.90	5.00	2.48
Fertilizer .....			0.00	23.20	26.70	18.39	17.07
Crop insurance .....			0.00	0.00	0.00	10.00	2.50
Herbicide .....			0.00	15.57	11.87	10.02	9.36
Insecticide .....			0.00	0.00	0.00	0.00	0.00
Repairs .....			3.77	3.03	8.70	2.62	4.53
Fuel, Oil and Lube...			3.09	3.48	7.60	3.64	4.45
Machine rent./cust.			.00	1.50	1.50	.00	.75
Hired labour .....			0.00	0.00	0.00	0.00	0.00
Operating interest ..			.31	2.36	2.57	1.66	1.73
<b>TOTAL .....</b>			<b>7.17</b>	<b>54.82</b>	<b>65.24</b>	<b>55.33</b>	<b>45.64</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....			2.57	4.94	13.10	4.33	6.24
Capital Opp. Cost ...			2.41	3.03	6.06	2.96	3.61
Insurance, housing ..			.80	1.01	2.07	1.01	1.22
<b>TOTAL .....</b>			<b>5.78</b>	<b>8.98</b>	<b>21.23</b>	<b>8.30</b>	<b>11.07</b>
<b>TOTAL COST OF PRODUCTION .</b>			<b>12.95</b>	<b>63.80</b>	<b>86.47</b>	<b>63.63</b>	<b>56.71</b>
<b>CONTRIBUTION MARGIN .....</b>			<b>-7.17</b>	<b>83.78</b>	<b>77.26</b>	<b>57.17</b>	<b>52.76</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>			<b>-12.95</b>	<b>74.80</b>	<b>56.03</b>	<b>48.87</b>	<b>41.69</b>



**LOCATION:**

11 miles southwest  
of Falher

**COOPERATOR PROFILE**

ID# : 135-92-12

**FARM DESCRIPTION:**

The cooperator has a 1960 acre farm with economic and agronomic data being supplied from a 100 acre field. The cooperator has two fields enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of fine texture, on land classified as flat. Organic matter content is 4.26%

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to both be low.

**CONSERVATION SYSTEM DESCRIPTION:**

This is reduced tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
clover	wheat	peas	wheat

Forages and legumes are included in the rotation and utilized for incorporation/green manure.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to reduce perennial weeds. The other conservation goal is to improve seedbed moisture.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from reduced cultivation. Chemicals have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

For the time being the cooperator has no plans for any future changes.

Economic Summary for (Code#:135) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Wheat	Peas	-----
Yield .....				130.00	50.00	35.00	-----
Price .....				.23	1.59	6.00	-----
<b>TOTAL .....</b>				<b>29.90</b>	<b>79.50</b>	<b>210.00</b>	<b>106.47</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				0.00	7.20	35.00	14.07
Seed treatment .....				0.00	0.00	.08	.03
Fertilizer .....				0.00	26.70	8.70	11.80
Crop insurance .....				0.00	0.00	10.00	3.33
Herbicide .....				0.00	2.40	29.44	10.61
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				1.83	7.67	5.51	5.00
Fuel, Oil and Lube...				1.13	7.80	5.29	4.74
Machine rent./cust.				.00	1.50	.00	.50
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				.14	2.18	2.83	1.71
<b>TOTAL .....</b>				<b>3.10</b>	<b>55.45</b>	<b>96.85</b>	<b>51.80</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				6.90	8.56	11.58	9.01
Capital Opp. Cost ...				1.93	5.62	5.11	4.22
Insurance, housing ..				.68	1.89	1.77	1.45
<b>TOTAL .....</b>				<b>9.51</b>	<b>16.07</b>	<b>18.45</b>	<b>14.68</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>12.61</b>	<b>71.52</b>	<b>115.30</b>	<b>66.48</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>26.80</b>	<b>24.05</b>	<b>113.15</b>	<b>54.67</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>17.29</b>	<b>7.98</b>	<b>94.70</b>	<b>39.99</b>

## COOPERATOR PROFILE

ID# : 139-92-11

## FARM DESCRIPTION:

The cooperator has a 1881 acre farm with economic and agronomic data being supplied from a 85 acre field. The cooperator has one field enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of fine texture, on land classified as hilly.

The cooperator feels that there is no potential for salinity problems on this field. Water and wind erosion possibilities are evaluated to be moderate and low respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is conventional tillage system which does include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992	1993
clover	clover	incorp.	wheat

Forages and legumes are included in the rotation and utilized for incorporation/green manure, and harvested for seed.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve seedbed moisture. Other conservation goals are to reduce fertilizer inputs, improve time management, improve soil organic matter, increase profits, and to leave the land in good condition.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from the use of legumes/forages in the crop rotation. Weed control and crop management have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is the persistence of weed problems.

## FUTURE CHANGE ANTICIPATED:

With respect to important management decisions to be made in the future, the cooperator plans to ease over towards more reduced tillage seeding.

Economic Summary for (Code#:139) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....					Clov.In	Wheat	-----
Yield .....					0.00	38.00	-----
Price .....					0.00	1.78	-----
<b>TOTAL .....</b>					<b>0.00</b>	<b>67.64</b>	<b>33.82</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....					0.00	3.70	1.85
Seed treatment .....					0.00	1.13	.56
Fertilizer .....					0.00	3.72	1.86
Crop insurance .....					4.84		4.84
Herbicide .....					12.00	4.20	8.10
Insecticide .....					0.00	0.00	0.00
Repairs .....					1.41	1.68	1.55
Fuel, Oil and Lube...					3.37	2.46	2.91
Machine rent./cust.					3.25	.00	1.63
Hired labour .....					0.00	0.00	0.00
Operating interest ..					.82	.54	.68
<b>TOTAL .....</b>					<b>25.70</b>	<b>17.42</b>	<b>21.56</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....					2.82	1.65	2.24
Capital Opp. Cost ...					1.61	.96	1.29
Insurance, housing ..					.54	.33	.43
<b>TOTAL .....</b>					<b>4.97</b>	<b>2.94</b>	<b>3.96</b>
<b>TOTAL COST OF PRODUCTION .</b>					<b>30.67</b>	<b>20.36</b>	<b>25.52</b>
<b>CONTRIBUTION MARGIN .....</b>					<b>-25.70</b>	<b>50.22</b>	<b>12.26</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>					<b>-30.67</b>	<b>47.28</b>	<b>8.30</b>



## COOPERATOR PROFILE

ID# : 152-92-11

## FARM DESCRIPTION:

The cooperator has a 1265 acre farm with economic and agronomic data being supplied from a 120 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of fine texture, on land classified as gently flat. Organic matter content is 4.8%.

The cooperator feels that there is no potential for salinity problems on this field. However water and wind erosion possibilities are felt to be moderate and low respectively.

## CONSERVATION SYSTEM DESCRIPTION:

This is a conventional tillage system which includes fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992
clover	clover	clover incorp.

Forages and legumes are included in the rotation and cut for hay.

## GOALS:

The cooperator feels that the most important goal to be achieved on this field is the desire to improve soil organic matter. Other conservation goals are to conserve soil moisture and reduce wind erosion.

## MAIN FACTORS CONTRIBUTING TO SUCCESS:

The cooperator feels his success to date stems mainly from the use of chemicals for weed control. Experience and rotation choice have also contributed.

## CHALLENGES FACED:

An aspect of conservation farming that has presented a challenge is low commodity prices.

## FUTURE CHANGE ANTICIPATED:

For the time being no future changes have been planned by the cooperator.

Economic Summary for (Code#:152) Rotation #:1 Field #:1

	1987	1988	1989	1990	1991	1992	AVERAGE
<u>Revenue per Acre:</u>							
Crop .....				Clov. In	Canola Clov.In.		-----
Yield .....				0.00	40.00	180.00	-----
Price .....				0.00	6.20	.35	-----
<b>TOTAL .....</b>				<b>0.00</b>	<b>248.00</b>	<b>63.00</b>	<b>103.67</b>
<u>Variable Costs Per Acre:</u>							
Seed & Twine.....				0.00	.08	0.00	.03
Seed treatment .....				0.00	3.92	0.00	1.31
Fertilizer .....				0.00	29.91	0.00	9.97
Crop insurance .....				0.00	0.00		0.00
Herbicide .....				0.00	34.14	.72	11.62
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				5.19	5.31	3.90	4.80
Fuel, Oil and Lube...				5.56	4.90	4.32	4.93
Machine rent./cust.				.00	3.89	.00	1.30
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				.51	5.34	.23	2.02
<b>TOTAL .....</b>				<b>11.26</b>	<b>87.50</b>	<b>9.17</b>	<b>35.97</b>
<u>Fixed Machinery Costs:</u>							
Depreciation .....				4.33	18.88	20.53	14.58
Capital Opp. Cost ..				4.06	7.80	8.60	6.82
Insurance, housing ..				1.35	2.66	2.96	2.32
<b>TOTAL .....</b>				<b>9.74</b>	<b>29.34</b>	<b>32.09</b>	<b>23.72</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>21.00</b>	<b>116.83</b>	<b>41.26</b>	<b>59.69</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>-11.26</b>	<b>160.50</b>	<b>53.83</b>	<b>67.69</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>-21.00</b>	<b>131.17</b>	<b>21.74</b>	<b>43.97</b>

**LOCATION:**

10 miles south of  
Falher

**COOPERATOR PROFILE**

ID# : 152-92-12

**FARM DESCRIPTION:**

The cooperator has a 1265 acre farm with economic and agronomic data being supplied from a 120 acre field. This field is one of two fields that the cooperator has enrolled on the Systems Evaluation program.

The soil is a grey wooded type, of fine texture, on land classified as gently flat. Organic matter content is 4.3%.

The cooperator feels that there is no potential for salinity problems on this field. However water and wind erosion possibilities are felt to be moderate and low respectively.

**CONSERVATION SYSTEM DESCRIPTION:**

This is a conventional tillage system which does not include fallow in the rotation. The crop rotation on the field is listed as:

1990	1991	1992
wheat	wheat	clover incorp.

Forages and legumes are included in the rotation and cut for hay.

**GOALS:**

The cooperator feels that the most important goal to be achieved on this field is the desire to improve soil organic matter. Other conservation goals are to conserve soil moisture and reduce wind erosion.

**MAIN FACTORS CONTRIBUTING TO SUCCESS:**

The cooperator feels his success to date stems mainly from the use of chemicals for weed control. Experience and rotation choice have also contributed.

**CHALLENGES FACED:**

An aspect of conservation farming that has presented a challenge is low commodity prices.

**FUTURE CHANGE ANTICIPATED:**

For the time being no future changes have been planned by the cooperator.

Economic Summary for (Code#:152) Rotation #:1 Field #:2

	1987	1988	1989	1990	1991	1992	AVERAGE
<b>Revenue per Acre:</b>							
Crop .....				Wheat	Wheat	Clov. In.	-----
Yield .....				50.00	45.00		-----
Price .....				3.15	1.78		-----
<b>TOTAL .....</b>				<b>157.50</b>	<b>80.10</b>	<b>0.00</b>	<b>79.20</b>
<b>Variable Costs Per Acre:</b>							
Seed & Twine.....				5.58	9.20	0.00	4.93
Seed treatment .....				1.68	2.13	0.00	1.27
Fertilizer .....				20.10	19.95	0.00	13.35
Crop insurance .....				3.63	0.00		1.82
Herbicide .....				27.03	18.13	.72	15.29
Insecticide .....				0.00	0.00	0.00	0.00
Repairs .....				5.70	11.68	3.80	7.06
Fuel, Oil and Lube...				8.12	10.74	3.71	7.53
Machine rent./cust.				1.50	1.50	.00	1.00
Hired labour .....				0.00	0.00	0.00	0.00
Operating interest ..				6.40	4.77	.21	3.79
<b>TOTAL .....</b>				<b>79.74</b>	<b>78.11</b>	<b>8.45</b>	<b>55.43</b>
<b>Fixed Machinery Costs:</b>							
Depreciation .....				19.73	20.53	3.19	14.48
Capital Opp. Cost ..				9.03	11.09	2.92	7.68
Insurance, housing ..				3.06	3.75	.97	2.59
<b>TOTAL .....</b>				<b>31.81</b>	<b>35.36</b>	<b>7.08</b>	<b>24.75</b>
<b>TOTAL COST OF PRODUCTION .</b>				<b>111.55</b>	<b>113.47</b>	<b>15.54</b>	<b>80.18</b>
<b>CONTRIBUTION MARGIN .....</b>				<b>77.76</b>	<b>1.99</b>	<b>-8.45</b>	<b>23.77</b>
<b>RETURN TO LAND, LAB. &amp; MGMT</b>				<b>45.95</b>	<b>-33.37</b>	<b>-15.54</b>	<b>- .98</b>









National Library of Canada  
Bibliothèque nationale du Canada



3 3286 50421 6066